IMPERIAL
Early Career
Researcher Institute

The Change Project

What is the change project?

The change project is a series of coaching tools to help Early Career Researchers (ECRs; Doctoral Students and Early Career Research Staff) expand their career thinking beyond the academic context, nudging them to consider and experiment with different career ideas.

Who is this tool kit for?

This tool kit is for anyone at Imperial who supports ECRs with their career development. This includes Principal Investigators (PIs), Professional Services and other ECRs in a peer support capacity.

When could it be used?

It will be particularly useful during the annual review conversation (ARC), as ECRs approach the end of their contract and/or within the context of a mentoring relationship.

The ten tools

1. Exploring career success
2. Career planning
3. Challenging the the sunk cost bias
4. Acknowledging grief
5. Values
6. Identifying skills for jobs
7. Skills evaluation
8. Designing a new role: Keep, Lose, Add
9. Career options
10. Low-risk experiments

Exploring Career Success

Views of career success are shaped by many factors including family, friends and colleagues. It is worth exploring such factors with ECRs as a starting point for thinking about career change.

This tool helps ECRs think about how their view of career success might be shaped by social context.

It gives them an insight into how their views about career success might help or hinder their career progression.

Tool 1

Ask the ECR the questions in the green boxes to help them reflect on their perception of career success and how this has been shaped.

Information	Expectations	Feedback	Modelling	Support
What and how is information about careers discussed around you?	What career options are acceptable in the circles you mix in?	What do people say about who you are and what you do?	Who do you see as successful in their career?	What type of career support is available to you at work and beyond?

How have family, colleagues and friends shaped your ideas about career success?

How have your ideas about career success helped or hindered you?

Career Planning

Many career pathways today are non-linear, like a climbing wall rather than a ladder. Changing labour markets, technologies and political situations mean that sectors and jobs change rapidly. People's personal circumstances and needs also change over time.

Most ECRs will step away from the 'academic career ladder' at some point in their career for personal or circumstantial reasons. Therefore, individuals today need to be both strategic and nimble in the way they plan their career.

This tool helps ECRs think about career planning from two different, but not mutually exclusive, perspectives.

Tool 2

Ask the ECR to look at the different, but not mutually exclusive, approaches to career planning in the table. Then ask them the questions in the green boxes to help them reflect on their approach to career planning.

Traditional Career Planning	Planned Happenstance
Matches skills and interests to known jobs	Accepts there are new job titles arising every day
Makes clear decisions about what is next and sticks to these	Keeps a more open mind to unexpected opportunities
A logical and systematic approach	A flexible, non-linear, curious approach
Need for certainty	More accepting of uncertainty

Are there elements of the different approaches that resonate with you?

Which type of approach (or approaches) is (are) likely to be helpful in your current situation and why?

What could you do to plan your career more effectively going forward?
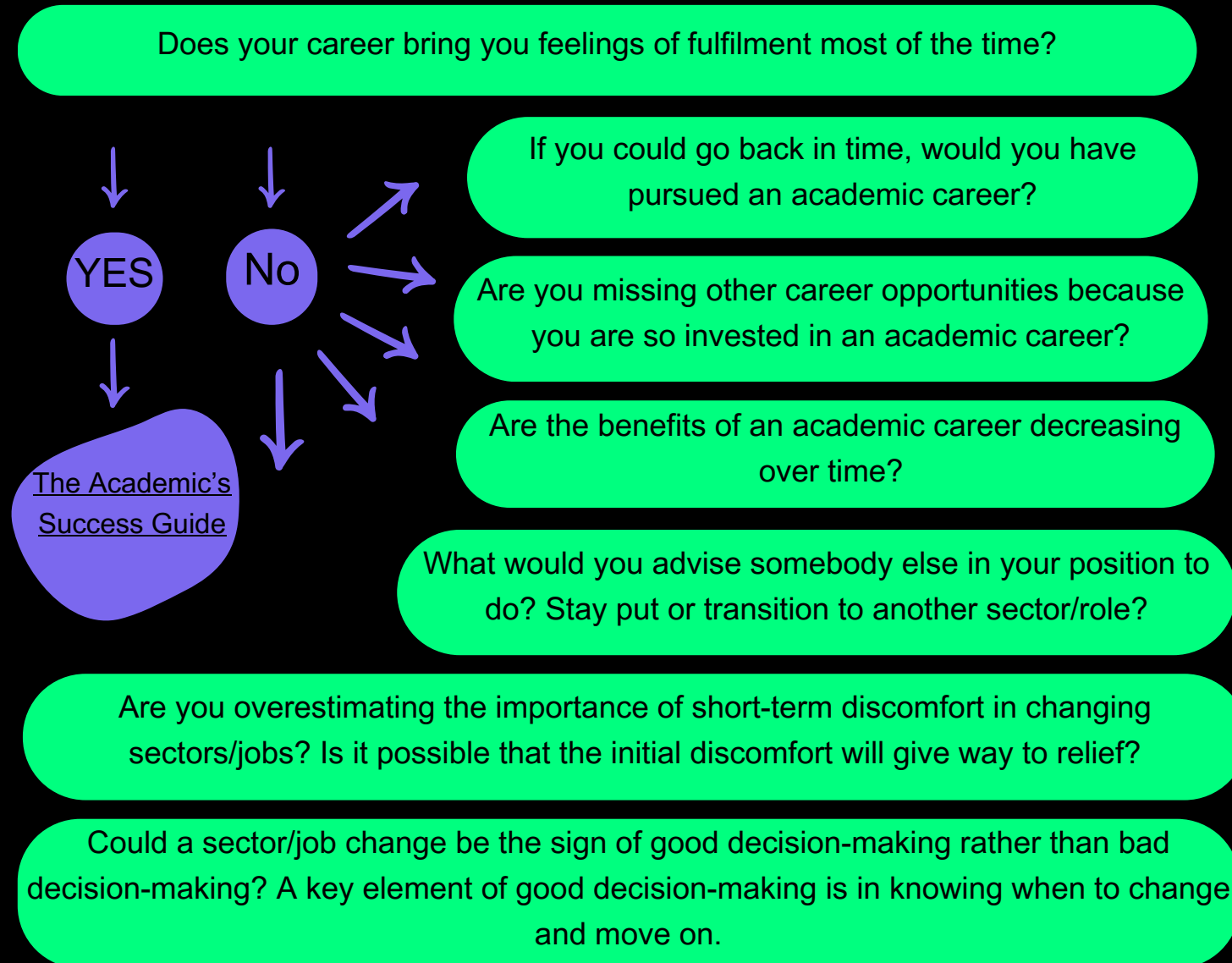
Challenging the sunk cost bias

When one has made significant intellectual, financial and personal investments in an endeavour, this endeavour, understandably, becomes deeply significant. Individuals may then be reluctant to move on from the endeavour.

In the context of career management, an ECR may be reluctant to move from an academic career because they have invested so heavily in it, even when it is clear that moving would be beneficial.

This tool helps ECRs to rethink what is known as the **sunk cost bias** within the context of their career management.

Tool 3

Ask the ECR the questions below to help them challenge the sunk cost bias.

Does your career bring you feelings of fulfilment most of the time?

YES

No

The Academic's Success Guide

If you could go back in time, would you have pursued an academic career?

Are you missing other career opportunities because you are so invested in an academic career?

Are the benefits of an academic career decreasing over time?

What would you advise somebody else in your position to do? Stay put or transition to another sector/role?

Are you overestimating the importance of short-term discomfort in changing sectors/jobs? Is it possible that the initial discomfort will give way to relief?

Could a sector/job change be the sign of good decision-making rather than bad decision-making? A key element of good decision-making is in knowing when to change and move on.

Acknowledging grief

Most ECRs, at some point, will move on from an academic position to an alternative role , for example, a role in industry.

If this move was not planned or expected, some ECRs may experience a rollercoaster of emotions similar to people experiencing grief or other types of life change.

Such emotions do not occur in any particular order and are likely to be unique and personal.

For some, it can be useful if their feelings are heard and acknowledged.

Tool 4

If you think that the ECR wants to discuss how they feel, show them the images below, which are derived from the Kubler-Ross change curve. Ask them if they are experiencing any of the sentiments highlighted.

It might help to point out that such feelings and sentiments are normal and that some of the more challenging feelings, such as anger, are likely to pass with time.

No! I refuse to believe I can't secure an academic role!

What? My contract has ended, and I have not secured more funding?

Argh! The academic career structure is unfair!

Ho-hum: I have no motivation to move forward.

OK! I am ready to move forward.

Right! Let's look at my options.

Career values

When people are thinking about careers, it helps to step back and consider personal values i.e. what is important in one's career and life.

Identifying values can help individuals reflect on, evaluate and screen career opportunities.

The more one's career aligns with one's values, the more content one is likely to be in their role.

Tool 5

Explore the career values of the ECR, using the table below.

Ask '**what is important in your career?**'

Start with the table below for ideas and expand if the ECR has their own ideas.

Core values	Autonomy	Integrity	Creativity or Innovation	Prestige
	Respect	Excellence	Status	Honesty
Work Environment	Work life balance	High Earnings	Fairness	Structure
	Recognition	Flexibility	Competition	Diversity
Activities	Team Work	Helping Others	Variety	Solving Problems
	Challenging	Impactful	Home- based, Office-based, Field-based	Analytical

Identifying skills for jobs

When thinking about promotion, a job change, or even a career change, it is crucial to look ahead and identify which skills and attributes are required in potential new roles.

This involves online research as well as in-person research!

Job descriptions and company websites do not always tell the whole story about what skills and attributes are needed for jobs.

Tool 6

Ask the ECR to find **5 job descriptions that appeal to them.**
Then suggest the following:

Cut and paste the job descriptions into a Large Language Model AI software, such as CoPilot or ChatGPT. Then use the prompt **'what skills are commonly required for these jobs?'**

Cut and paste 5 job descriptions into a word cloud to see if some skills are represented in large text, indicating they are common in all the jobs.

Scour networks for people that are in **roles of interest.** Ask colleagues, mentors, bosses for relevant contacts. Look on LinkedIn for relevant people and identify university alumni using the relevant search functions. See the ECRI 'make connections' page for more information about the contacts database.

Ask for 10 - 20 minutes of their time and ask them what skills and attributes they think are important in the roles.

Skills evaluation

It is important that ECRs do a thorough skills evaluation to ascertain the skills they have developed in their career. This includes professional skills, such as the ability to work in a team, as well as their expert knowledge in a subject or their specialist research skills.

Professional skills are highly transferable to a range of roles beyond the academic context; identifying and evidencing these can help ECRs broaden their career options.

Tool 7

The table below lists 3 typical professional skills that are required for many roles, together with behaviours associated with each skill. Ask the ECR to think about, and record, scenarios, tasks and activities when they may have developed each skill below.

Skill	Behaviours associated with the skill
Teamwork	- Seeks out opportunities to build relationships with people - Asks for, and learns from, other people's approaches - Contributes own ideas and enhances other people's ideas - Facilitates agreement between others to achieve win-win situations
Written and spoken communication	- Speaks and writes clearly, adapting content, language, tone and length of communication for different stakeholders - Listens to others to understand their perspective and drivers - Asks questions to clarify and understand others - Openly shares information, keeping people informed
Organisation and time management	- Develops and sets clear objective in line with agreed strategies - Allocates the appropriate amount of time to ensure completion of work - Anticipates potential risks and plans contingencies

Designing a new role: Keep, lose, add

When people are thinking about roles and careers, it can help to reflect on the elements of their role that they want to keep, elements that they want to expand and elements that, in an ideal world, they would lose.

This exercise can help individuals potentially adapt their current role and/or help individuals think about what they might want in a new role if they are thinking about a career change.

Tool 8

Ask the ECR the questions in the blue boxes below to help them either reshape their current role and/or begin constructing a new role. Ask them to write an 'ideal' job description for them.

Keep

What aspects of your role continue to bring you fulfilment?

What do you want to **keep**?

Lose

What aspects of your role no longer bring you fulfilment?
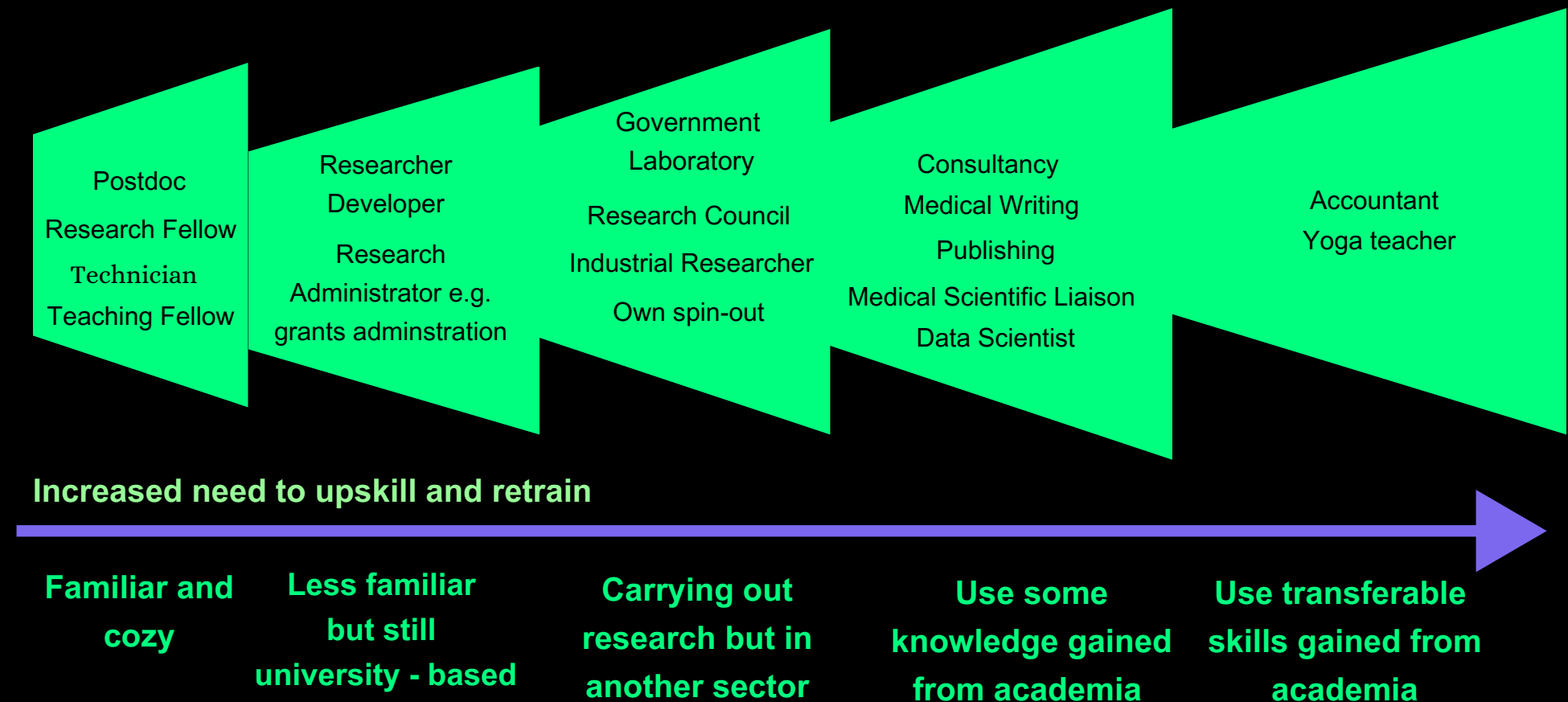
What do you want to **lose**?

Add

What would you add to your role if you could?

What do you want to **add**?

Career options

Ask the ECR how far from their current role they want to move, when considering their career options. The widening funnel below illustrates an increasing number of options moving from left to right, but with an increased need to upskill and/or retrain. The bottom blue box has links to a more extensive range of career options. PGRs, Postdocs and Fellows at Imperial can also book an appointment with the careers service here.

Postdoc
Research Fellow
Technician
Teaching Fellow

Researcher Developer

Research Administrator e.g. grants adminstration

Government Laboratory

Research Council

Industrial Researcher

Own spin-out

Consultancy
Medical Writing

Publishing

Medical Scientific Liaison

Data Scientist

Accountant
Yoga teacher

Increased need to upskill and retrain

Familiar and cozy

Less familiar but still university - based

Carrying out research but in another sector

Use some knowledge gained from academia

Use transferable skills gained from academia

Bioscience Careers: Making Career Choices

Who's hiring Physics PhDs?

Industry Careers for STEM Professional

Possible Careers for PhDs in Biomedical Science

Low risk experiments

Moving to a different sector, such as industry, or changing careers often feels risky. What happens if an ECR moves to an industry role and does not enjoy working in the new sector?

One way to minimise the risk of moving sectors and/or changing careers is to try low-risk experiments. In the context of career change, this means thinking creatively about ways to gain a 'taste' of the new career.

Tool 10

Discuss different ways to get a 'taste' of a role, or roles, being considered. There are a few ideas below.

LEARN: Look at online courses to upskill and learn elements of the new role e.g. do a course to learn a new programming skill for data science roles.
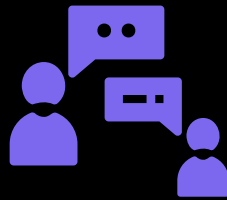
TALK: Organise a brief discussion (informational interview) with a person doing the job you are interested in. Ask lots of questions about the role and the company. See the ECRI 'make connections' page for more information about the contacts database.
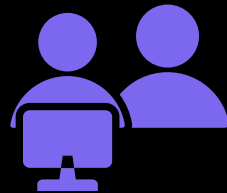
WATCH: Organise 1 - 2 days of work shadowing if possible. Use the 10 development days in your Imperial contract.

TRY: Think about ways to try out the new role. Volunteer, work part-time, take time from your 10 development days, organise a secondment or a job swap. It is difficult but not impossible.

References

Tool 1

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Tool 2

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- Krumboltz, J. D., & Levin, A. S. (2004). *Luck is no accident: Making the most of happenstance in your life.* Impact Publishers.
- Bright, J., & Pryor, R. (2012). Chaos career theory [Video]. YouTube. https://www.youtube.com/watch?v=xyz123

Tool 3

- Wilson, T. D., & Arkes, H. R. (2008). My loss is your loss... Sometime: Loss aversion and the effect of motivational biases. *Risk Analysis*, 28(4), 929-938.
- Letting go of sunk costs. (2014, September). *Psychology Today.* https://www.psychologytoday.com/gb/blog/anxiety-files/201409/letting-go-sunk-costs
- The sunk cost fallacy. (n.d.). *Angewandte Chemie International Edition.* https://onlinelibrary.wiley.com/doi/full/10.1002/anie.202208429

Tool 8

- Prescott, H. (2023, December 2). Keep, lose, add: The 'bits' of academia you REALLY enjoy… and how to find work based on these. *Postgradual: The PhD Careers Blog.* https://phd-careers.co.uk/2023/12/02/what-bits-of-academia-do-you-really-enjoy-and-how-to-find-work-based-on-these/

Tool 9

- Vitae. (n.d.). *Broadening horizons diagram.* In *Career wise researcher.* https://www.abdn.ac.uk/careers/resources/documents/5503.pdf

Feedback

We are seeking feedback on the tools provided in The Change Project. We'd be grateful if you could take 5 minutes to complete four short questions in the Microsoft Forms link below - thank you.

https://forms.office.com/e/eXZKMxPgLf