

MY FUTURE IN STEM – FOR EVERY CHAPTER OF YOUR STEM CAREER

From Master's to PhD: Navigating Your Research Journey in STEM

Post-event Resource Pack

Thank you for attending the webinar. This resource pack contains three short activities to take action towards your PhD. You can work through each activity in any order.

Activity 1 — The PhD Decision Compass

Activity 2 — The Cold Email Toolkit

Activity 3 — Three Conversations in 30 Days

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An accompanying resource for attendees of the webinar 'From Master's to PhD: Navigating your Research Journey in STEM' held on 25 June 2026.

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About this pack

From Master's to PhD: Navigating Your Research Journey in STEM. This resource pack contains three short activities designed to help you move from listening to acting. Together, they prompt you to clarify where you currently stand in your thinking about a PhD, practise emailing a potential supervisor (often the most opaque part of the process), and build the conversations that will keep your thinking moving over the next month.

Each activity is independent. You can complete them in any order, and at any pace. We recommend taking your time to think through the answers to each activity. Remember, there is no right or wrong answer. This is your PhD, not anyone else's.

Before you start

You are not behind. A PhD is a substantial commitment, and the transition from Master's to doctoral study is one many people approach without all the information they need. The point of these activities is not to test what you already know but to make explicit what is often learned informally, through networks that some students have and others do not. Asking the questions in these activities is what people who go on to do PhDs do.

How long it takes

- Activity 1 (Decision Compass): 20–30 minutes, ideally somewhere quiet.
- Activity 2 (Cold Email Toolkit): 45–60 minutes, plus time to send.
- Activity 3 (Three Conversations): 30 days of light work. A plan for three conversations, each about 30 minutes, with short reflection notes.

Activity 1 — The PhD Decision Compass

Purpose: This activity helps you locate where you currently sit across four dimensions that are important in a PhD decision. These include motivation, fit, funding, and timing. This is not a readiness test, but a thinking tool. Complete it now, then again in three to six months. Your answers will probably change, and this is fine.

How to use it

Set aside 20–30 minutes. Find somewhere quiet. Write by hand or type. Answer each prompt in a sentence or two. It should be long enough to be honest, but don't get stuck trying to write something perfect.

Dimension 1: Motivation

Why a PhD, and why this research question?

- What question, problem, or area of work would you want to spend three to four years on? If nothing immediately comes to mind, that is also useful information.
- What is drawing you towards a PhD right now? Is it intellectual curiosity, a career goal, the next logical step, encouragement from someone you trust, or something else?
- What would you want to be able to do, know, or contribute by the end of a PhD that you cannot do now?
- If the answer to the previous question is mostly about a job outcome, what other routes could help you get there?

Dimension 2: Fit

What kind of research, what kind of supervisor, what kind of place?

- Name two or three researchers whose work interests you. If you cannot, this information is still useful, and Activities 2 and 3 will help you find them.
- What kind of research environment do you think you would thrive in: a large lab, a small group, fieldwork-heavy, computational, theoretical, applied, or interdisciplinary?
- What kind of supervisory relationship would suit you: hands-on and frequent, hands-off and independent, or structured weekly meetings?
- Where, geographically, are you willing and able to be, and why?

Dimension 3: Funding

How would this be paid for?

- Which funding routes are you currently aware of (UKRI doctoral training partnerships, charity funding, industrial CASE awards, university-funded studentships, self-funded)?
- What is your honest financial position over the next three to four years? [UKRI minimum stipends](#) currently stand at around £20,780 per year (2025/26 rate), with London weighting applied, but this varies by funder and is below median UK earnings.
- What is your view on self-funding? Is it a route you would consider, and on what terms?

- Are there funding routes you may be eligible for that you do not yet know much about? Most applicants miss some. Activity 3 helps with this.

Dimension 4: Timing

Now, later, or not at all?

- What would change for you in 12 months if you started a PhD now rather than then?
- What would you gain from a year in industry, teaching, research assistantship, or other work before applying?
- What would you lose by waiting?
- Are there reasons you feel pressure to decide quickly that are not actually about you?

My current best-guess next step

In one or two sentences, what is your current best guess for the next step?

Date: _____

Repeat this activity. Diary a date three to six months from now to repeat this Compass. Your answers will change. Comparing the two versions will help clarify your thinking.

Activity 2 — The Cold Email Toolkit

Purpose: Emailing a potential supervisor is the part of the PhD process that people from research-rich backgrounds often get help with informally. This activity makes the implicit explicit. It has three parts: a worksheet to articulate your research interest in 100 words, an annotated worked example, and a blank template you can adapt.

Part 1 – Articulate your research interest

Spend 30 minutes drafting answers to the following. Write without stopping or editing; you will have time to refine your writing later.

1. **Your research focus or area.** What broad area or question are you interested in? Write one sentence. Example: ‘I am interested in how soil microbial communities respond to drought in agricultural systems.’
2. **The why.** Why does this matter to you, personally, intellectually or practically? One sentence.
3. **The ‘so what’.** What would knowing more about this change, in the field, in practice, in policy? One sentence.
4. **The link to the supervisor.** Which of this person’s papers, projects, or current grants connects to your interest? Name it specifically. You will need to read at least two of their papers to do this. This is non-negotiable.
5. **The ask.** What are you specifically asking for? Do you need a 15-minute conversation, advice on whether to apply, or information about funded studentships? Be specific.

Now write the 100 words by combining the sentences from your answers from Q1 – 5 above.

My 100 words:

Part 2 – Annotated example

Subject: *PhD enquiry — soil microbial responses to drought (MSc Environmental Microbiology, University of X)*

Dear Dr [Surname],

I am completing an MSc in Environmental Microbiology at [**University X**], graduating in September 2026. I am writing because I am interested in pursuing a PhD on soil microbial responses to drought stress in agricultural systems, and your recent work, particularly your 2024 paper on microbial community resilience in maize cropping systems, connects closely to the questions I want to ask.

My Master's dissertation has looked at [**brief one-clause description**]. Through that work, I have become particularly interested in [**specific sub-question that follows from the supervisor's work**]. I would be keen to explore whether this is an area you might be open to supervising, and whether there are funded studentship opportunities in your group for the 2025–26 entry cycle.

I have attached my CV. If you are open to a brief conversation, I would be very glad to find a time that works for you.

Thank you for considering this, and I look forward to hearing from you.

Best wishes,

[Your name]

[Your university email (if you will still have access for at least 12 months after graduation)]

Why this email works

- The subject line tells the supervisor exactly what the email is about, your topic, and where you currently study. This earns the email a read.
- The opening sentence states who you are and when you're speaking. The second sentence states what you want to do and the specific paper that connects you to their work. Specific reference to a paper is essential, as generic praise will read as a mass-mailed email.
- The middle paragraph outlines your current trajectory, identifies a specific sub-question, and poses two clear questions. The funding situation is made explicit, and most supervisors will tell you the funding picture immediately if you ask.
- The sign-off is brief and professional, and it includes a clear next step. The CV is attached, but it is not the main focus, as the email has to do its own work.

Part 3 — Blank template

Use this as a starting point. Adapt the language to your voice. Do not paste it verbatim. This is your PhD, so no template can replace your unique experience, journey, and why.

Subject: PhD enquiry — [topic in five to eight words] ([your current programme])

Dear Dr [Surname],

I am completing [your current programme] at [your institution], graduating in [month/year]. I am writing because I am interested in pursuing a PhD on [topic in one clause], and your work — particularly your [year] paper on [specific topic] — connects closely to the questions I want to ask.

My [current programme] has involved [one-clause description of your most relevant work]. I have become particularly interested in [specific sub-question]. I would be keen to explore whether this is an area you might be open to supervising, and whether there are [funded studentship / self-funded] opportunities in your group for the [year] entry cycle.

I have attached my CV. If you are open to a brief conversation, I would be very glad to find a time that works for you.

Thank you for considering this, and I look forward to hearing from you.

Best wishes,

[Your name]

[Your university email]

Practical notes

- Send between Tuesday and Thursday, mid-morning. Emails sent on Friday afternoons get lost.
- If you do not hear back within three weeks, a single short follow-up is appropriate. After that, leave it. There are several reasons potential supervisors may not respond; try not to take it personally.
- Send to several supervisors. This is normal, and not a betrayal. PhD enquiries are not job applications.
- If a supervisor declines, ask whether they can suggest a colleague whose work might be a good fit. Remember, it never hurts to ask when the worst response you can get is a No.

Activity 3 — Three Conversations in 30 Days

Purpose: You have heard from a panel of people who have walked this path. The next step is to find three more, in your own networks, who can extend what you have learned. This activity gives you the structure to do that.

The three roles

Aim to have one conversation in each of the following categories over the next 30 days.

A current PhD student. Ideally in or near your area of interest, ideally at an institution you might consider applying to. They will give you the unvarnished version of doctoral life.

A recently completed PhD. Someone who finished within the past 1 to 3 years. They can tell you what the journey looked like from the other side, and what they did with the PhD after. Their honesty about what they wish they had known is especially valuable.

A trusted academic. Your Master's supervisor, a personal tutor, a module leader whose teaching you valued, or someone you have built a relationship with through internships or research projects. They know your work and can offer you tailored advice.

Finding people

You probably already know more people who can help than you realise. Start with people you have studied alongside who are now pursuing PhDs; researchers you have met at conferences or talks you have attended; people whose work you have read and cited; colleagues from internships or placements. If none of these applies, ask one academic you trust whether they know someone you could speak to. This is not an imposition. It is what academics do.

Question banks

You do not need to ask all of these. Pick three or four that matter most to you and bring them into the conversation.

For a current PhD student

- What does a typical week actually look like for you?
- What is the gap between the version of the PhD you imagined and the version you are living?
- How is your relationship with your supervisor going, and what would you do differently if you had to choose again?
- What is the funding situation like? Is your stipend liveable in this city?
- What community do you have? Where do you go when things are hard?
- Knowing what you know now, would you do this again?

For a recently completed PhD

- What was the application process actually like? What do you believe made the difference?
- What did you do that worked, and what did you do that you wish you had not?
- How did you choose your supervisor, and how did that decision shape your PhD?
- What did you do in your final year, and how did you decide what came next?
- Has the PhD opened the doors you expected? Different doors?
- If a Master's student asked you whether they should pursue a PhD now, later, or at all, what would you say?

For a trusted academic

- Based on what you know of my work, do you think a PhD is a good fit for me right now, or would a different next step serve me better?
- Whose work in this area do you think I should read or contact?
- What would you want me to know about the application process that is not covered in the official guidance?
- Are there funding routes I should know about that I might not have come across?
- Would you be willing to look at a draft of my research statement or a sample application?

Reflection log

After each conversation, take 10 minutes to note your responses to the prompts below.
Repeat for each of the three conversations.

Conversation 1: [name/role/date]

One thing this person knew that I did not:

One thing that surprised me:

One thing that changed in my thinking:

One question I now want to ask the next person:

Conversation 2: [name/role/date]

One thing this person knew that I did not:

One thing that surprised me:

One thing that changed in my thinking:

One question I now want to ask the next person:

Conversation 3: [name/role/date]

One thing this person knew that I did not:

One thing that surprised me:

One thing that changed in my thinking:

After all three conversations

Return to your Decision Compass (Activity 1) and update your 'next step' answer. Notice what has shifted.

Bonus Resource – Funding Your PhD

Most funded STEM PhDs in the UK are found through three routes: (1) national search portals such as FindAPhD and Jobs.ac.uk, (2) UK Research and Innovation (UKRI) doctoral training programmes (CDTs and DTPs), and (3) university-specific scholarships and studentships. If you are an international applicant, start searching early, apply broadly, and check eligibility requirements carefully.

National Search Portals

- [FindAPhD](#) – Search by subject area, funding type and international eligibility.
- [Jobs.ac.uk](#) – Advertises funded PhD studentships, research projects and doctoral training opportunities.

UKRI Funding and Doctoral Training Networks

[UK Research and Innovation \(UKRI\)](#) is the UK's main public research funder. Many funded PhD places are offered through [CDTs and DTPs](#).

- **Centres for Doctoral Training (CDTs)** – Structured, cohort-based doctoral programmes.
- **Doctoral Training Partnerships (DTPs)** – University consortia offering funded studentships across a broad range of disciplines.

UKRI and National Directories

- LIDo (London Interdisciplinary Doctoral Programme): <https://www.lido-dtp.ac.uk/>
- SouthWest Biosciences DTP (SWBio): <https://www.swbio.ac.uk/>
- Midlands Integrative Biosciences Training Partnership (MIBTP): <https://www.mibtp.org/birmingham>
- CDTs at Cambridge: <https://www.postgraduate.study.cam.ac.uk/funding>

University-Specific Scholarships

Many universities offer their own fully funded doctoral awards alongside UKRI-funded places.

- **University of Cambridge** – Gates Cambridge Scholarships
<https://www.postgraduate.study.cam.ac.uk/funding>
- **Imperial College London** – Imperial PhD Scholarships
<https://www.imperial.ac.uk/study/fees-and-funding/scholarships-search/>
- **King's College London** – Doctoral Research Funding
<https://www.kcl.ac.uk/study-legacy/funding>

- **University of Manchester** – President's Doctoral Scholar Awards
<https://www.manchester.ac.uk/study/postgraduate-research/funding/>
- **Queen Mary University of London** – Postgraduate Research Studentships
<https://www.qmul.ac.uk/postgraduate/research/funding/>

Funding for International Students

International applicants should also explore:

- Commonwealth Scholarships
- University-funded international scholarships and fee-waiver schemes
- UKRI-funded CDTs and DTPs that recruit international students
- Country-specific partnership programmes (e.g. China Scholarship Council partnerships)

Tips for International STEM Students

Search for **CDTs** and **DTPs**, as these often have dedicated funding for international students.

Confirm whether funding covers:

- Tuition fees
- Living stipend
- Research and training costs

Check whether the university covers any difference between Home and International tuition fees.

Start your search at least 9–12 months before your intended start date.

Remember: Funding is highly competitive, but successful applicants typically apply to multiple opportunities and regularly monitor funding databases throughout the year. Persistence is often just as important as academic achievement.

Quick Tip

When searching for opportunities, use keywords such as "CDT", "DTP", "Doctoral Landscape Award (DLA)", "fully funded PhD", and "students worldwide". These programmes often provide the most comprehensive funding packages for STEM students, including international applicants.

Sources and further reading

The three activities in this pack are original tools designed for this event and draw on the frameworks below. Sources are cited to credit the intellectual foundations that inform the activities and to point you toward further reading.

Anyogu, A. (2015). [So you want to do a PhD? A survival guide](#) (Part 1). *A PhD will stretch you on all levels, not just mentally but also physically, emotionally and even financially. This article raises important points for reflection for prospective and current PhD candidates. It is one of the most-read articles on aspiringprofessionalshub.com, which also includes several articles on The PhD Experience.*

Granovetter, M. S. (1973). [The strength of weak ties](#). *American Journal of Sociology*, 78(6), 1360–1380. *Explains the principle that consequential opportunities and information often come through acquaintances rather than close ties. This is why widening your network is important. One of our panellists spoke about the importance of being known to a wider network who can help connect to opportunities.*

Pyhältö, K., Vekkaila, J., & Keskinen, J. (2012). Exploring the fit between doctoral students' and supervisors' perceptions of resources and challenges vis-à-vis the doctoral journey. *International Journal of Doctoral Studies*, 7, 395–414. *The supervisor–student fit literature emphasises explicit conversation about expectations as a determinant of doctoral wellbeing. There was a consensus among our panellists that this fit is critical to your success, so choose well.*

Vitae (2026). *Researcher Development Framework*. Available at: [vitae.ac.uk](https://www.vitae.ac.uk). *Vitae's RDF is the UK's authoritative description of the capabilities researchers develop during and after a doctorate. It informs the 'what would you want to be able to do' prompt in the Motivation dimension.*

Wisker, G. (2012). *The Postgraduate Research Handbook* (2nd ed.). Palgrave Macmillan. *An excellent resource providing practical guidance on choosing a research area, supervisor, and institution; a standard reference work for new postgraduate researchers.*

A note on citations. This pack credits sources because the move from Master's to PhD is fundamentally about learning to engage with scholarly literature as a contributor rather than a consumer. Reading even one of these sources will teach you something the panel could not cover in an hour.