Fellowship Applications

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PDRA and Fellows Away Day 2024

10th September 2024

My route to a fellowship

- 2014 – 2018: PhD at Liverpool on muon g-2 experiment at Fermilab
- 2018 – 2022: Fermilab Research Associate, muon g-2 experiment
  - Applied for STFC ERF and Royal Society URF in 2022 round (3-4 years of PDRA)
  - Both unsuccessful – made first round of shortlisting for URF but not invited to interview
- 2022 – 2024: Research Associate at Liverpool, muon group
  - Applied for ERF and URF (5-6 years of PDRA)
  - URF first round of shortlisting, no interview
  - Successful ERF

- With the benefit of hindsight I'll try and explain how I got here…

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  - A lot of luck!!!!!!!!!!
  - But I'll try and be more helpful than just advising you to be lucky ☺

Personal experiences

- Applying in 2021 after 3 years of post-doc was possibly a bit early
  - But it was very good experience
  - I felt a lot more confident in my second application thanks to the experience and feedback received in my first attempt
  - Feedback was (mostly) constructive and I knew what I needed to improve

- Start early and get as much feedback as possible
  - Physics department were very helpful
  - At least three different people from different experiments/groups read my application and gave feedback.
  - Advice from people outside your direct area is helpful.

How to plan a proposal

How to plan your journey when you don't know where you're going?

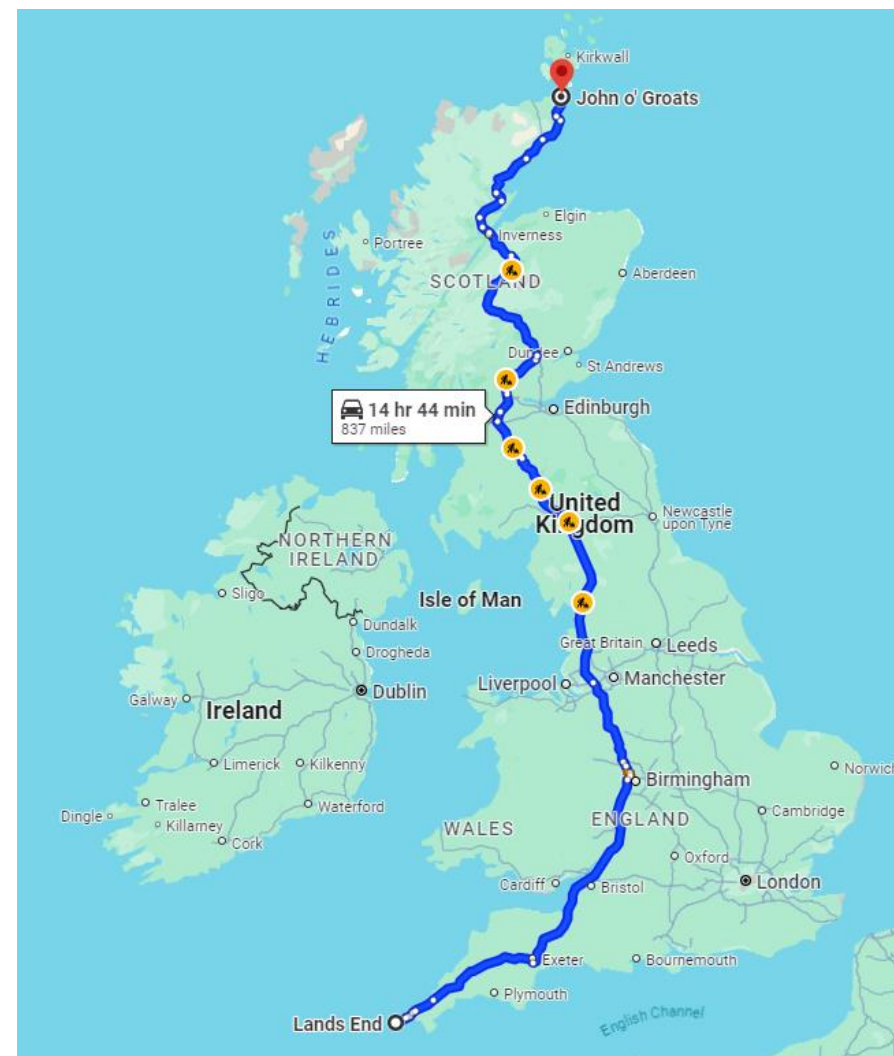I tried to be clear in my mind about a few things:

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- What are the biggest issues in my field now? What is my community worried about?
  - How do my current activities fit into this?
- Do I want to change sub-field / experiment / specialism?
  - What do I need to do now to facilitate this?
- Do I have the skills I need to enable me to solve the problem I want to tackle?
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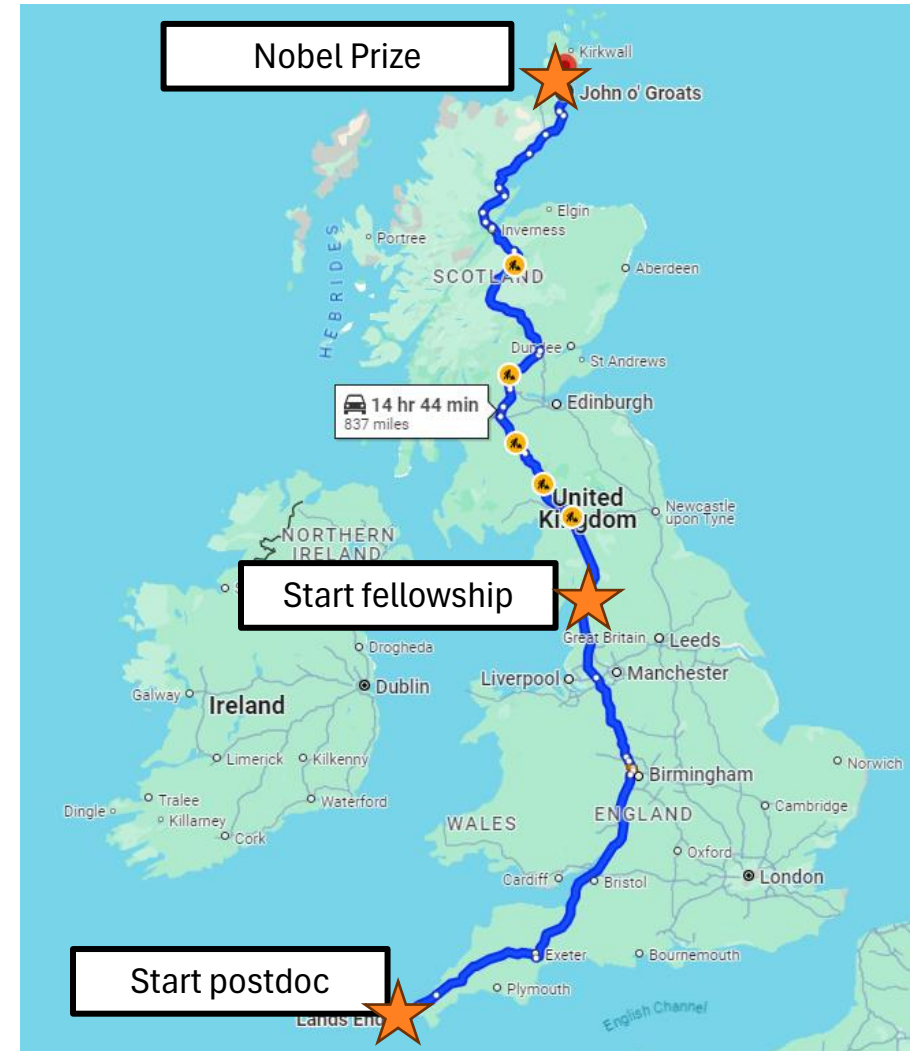 - What can I do to get them?

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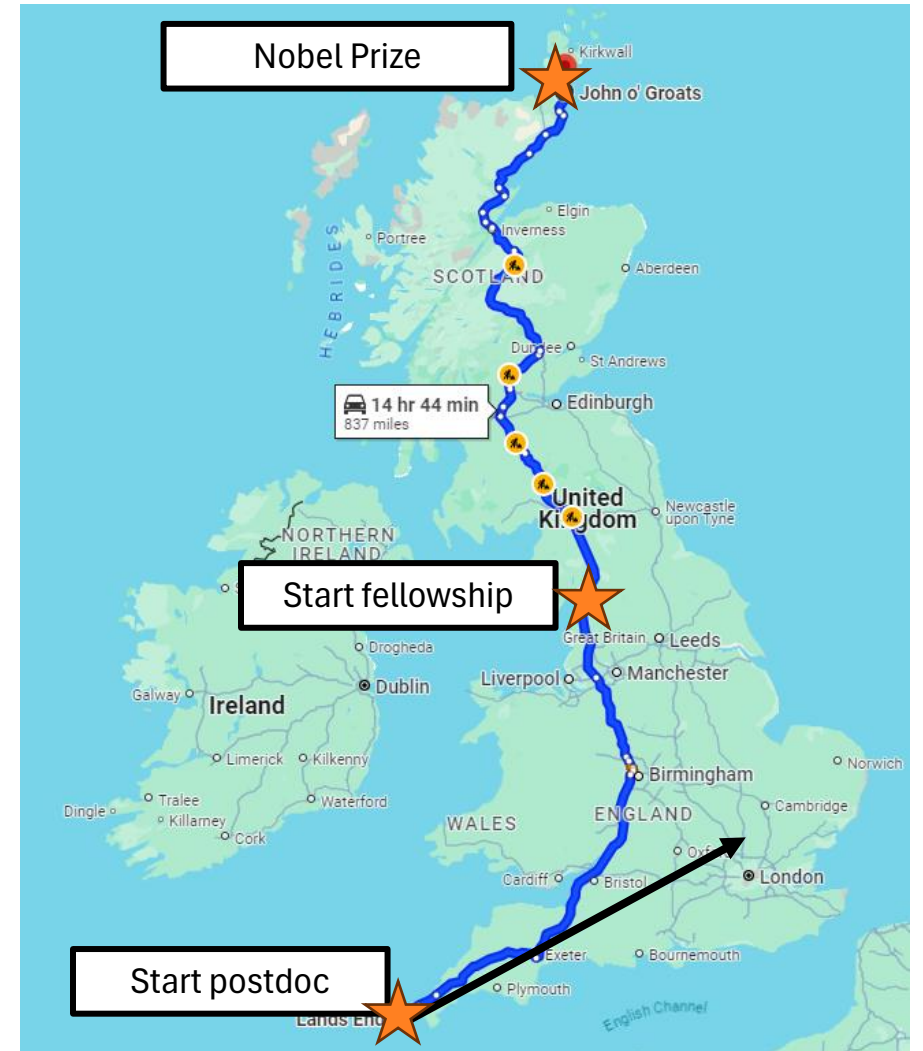 - What can I do to get them?

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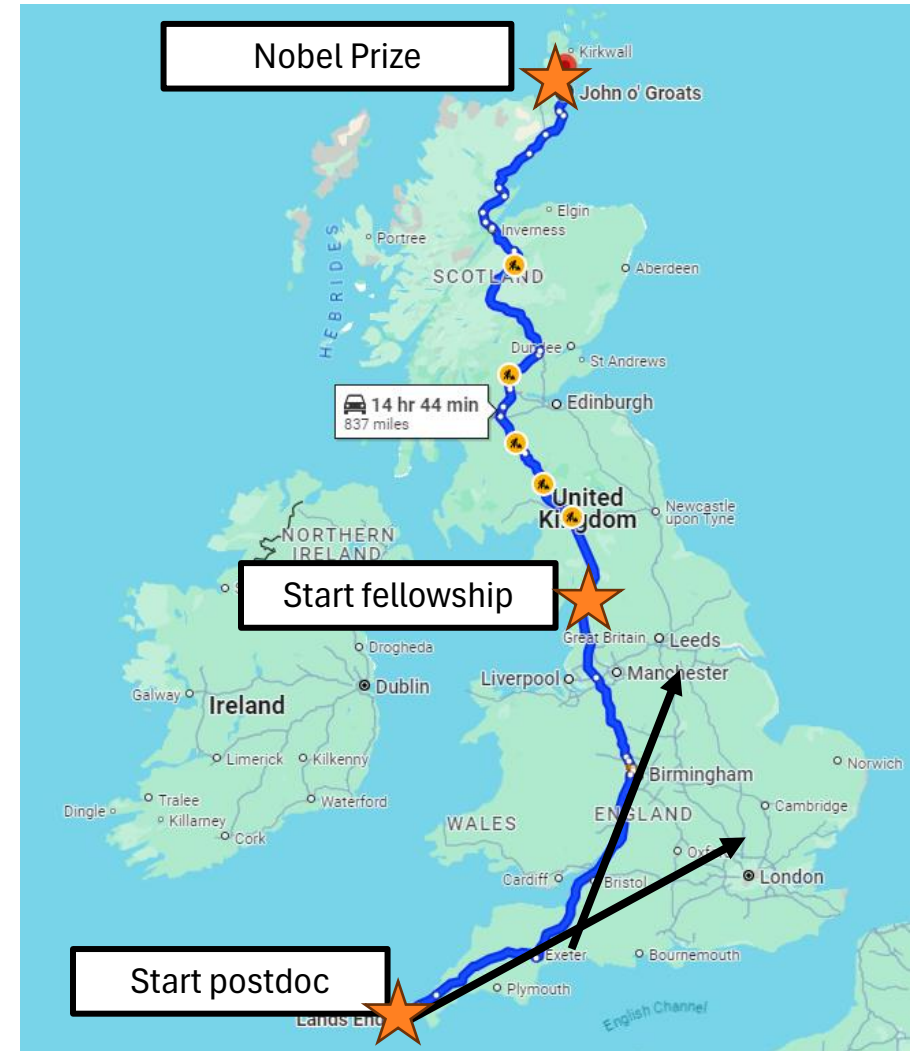
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Nobel Prize

Start fellowship

Start postdoc

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Telling a story

Use your experiences and decisions to tell a convincing story

- You want the reader of your application to understand your journey and the decisions you have made

- Make your decisions fit a narrative
  - Might not be aware of it at the time but all (most) of the decisions you make have got a good reason behind them!
  - Explaining your reasoning shows **vision**

- If your proposal has narrative "flow" it's easier to read

- Point readers towards the logical conclusion of awarding you a fellowship!

AI generated image of "cosy person reading"

Before you write your application

Audit your application criteria: what boxes do you need to tick?

- Narrative CV / R4RI headings are helpful here
- Look at the headings and make a list of things you've done that are relevant to each one
- It's never too early to do this
  - Identify gaps
  - Discuss with your supervisor or collaborators/mentors how you'll fill them

- I didn't do this from the start of my postdoc but wish I had
  - The first application I submitted was the first time I really did this
  - Afterwards, I knew what I needed to do by the next time I submitted

Module 1 – Contributions to the generation of new ideas, tools, methodologies or knowledge

Module 2 – The development of others and maintenance of effective working relationships

Module 3 – Contributions to the wider research and innovation community

Module 4 – Contributions to broader research/innovation-users and audiences and towards wider societal benefit

Advice for writing the application – what worked for me

Structure your argument – make your evidence speak louder

- Think of your proposal like an argument with premises and a conclusion
    - Clearly state your aims
    - Provide supporting evidence
    - Tell a story that leads the reader to conclude that:
        - This is the right project and it's important for the field that it is done
        - Now is the right time to do it
        - You are the right person to do it

- I kept these three conclusions in mind when writing everything section of my application

- I tried to ensure that every paragraph I wrote was in direct support of the conclusions

- Tried to use each piece of my "evidence" to maximum effect rather than just a list of achievements

- A coherent story helps the reviewers understand why you are right for your chosen project
    - + evidence of good decision-making and judgment

Challenging things

No such thing as perfect – show you understand the risks and weaknesses

- There is **no such thing** as the perfect application. There are pros and cons to almost everything.

- For example:
  - I've worked on the same experiment for my PhD and both my post-docs
  - Strength: I am very experienced in my field and have leadership in the experiment
  - Weakness: I have narrower experience than someone who has moved around

- Initially I found this very frustrating
  - Then I realised that **I could choose what I wrote**
  - You define the project, and you can decide what is important in making the project a success

- Other challenges
  - Sensible consideration of risks without making it sound like the project isn't going to work
  - Need to be working on something "novel" – but that will always entail risk
  - If you're working on something new, how can you prove you're the right person?
  - In my case: risk is that the experiment is not yet formally approved by CERN – out of my hands...
  - At interview I tried to show I had other options if my proposed project didn't go to plan

Advice for a well-rounded application

By the interview, all applications have been deemed "strong" – how to stand out?

- Part of being the right person to deliver your aims includes non-scientific contributions to the community

- Need to show that your project will have impact
  - Scientific impact on your field
    - Publications, invited talks, prizes, …
  - Impact on your community
    - Committee membership, organising events e.g. journal clubs, reviewing papers, …
  - Impact in society
    - Directly related to your research (e.g. develop technology that solves the energy crisis)
    - Indirect impacts (EDI, outreach, education, …)

- I was specifically asked about EDI, outreach and communication in my interview

- It's not just a "box to tick" but is regarded as being part of being a good scientist

- It is also a way to make you stand out among a lot of very strong applications
  - Or rather: it is a way to make sure other applications won't stand out over yours

General advice

- Talk to as many people as possible!
    - Colleagues at your host institution
    - Collaborators in the wider field e.g. at conferences or collaboration meetings
    - Participate in "community planning" events
    - UOL help e.g. Peer Review College, Narrative CV guidance
    - The more informed you are, the easier it will be to make decisions.

- Keep asking yourself the "key questions" (Slide 5)
    - Be adaptable
    - Research is inherently unpredictable
    - Are you prepared to make changes if you need to?
    - Fill the gaps as you find them – the sooner the better…

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Start Early

Thank you and good luck!