

Early Career Choices: Where to go and how to get there



Dr Jenny Woods
Senior Research Facilitator,
Oxford Physics

Dr Holly Pacey
Al Schmidt Fellow,
Oxford Physics

Outline

- Career options
- Roles beyond academia
- Where to look for academic roles
- Evidencing your fit – types of CV
- Making your own opportunities – Fellowships in depth
- What makes a good Fellowship application?
- Questions
- *Lots more info included at the end of this presentation*

Where are you now, where do you want to go?

- Take time to think - what's important to you in your career and life?
Where would you like to be on a 5 year, 10 year timescale?
- Find a mentor who has taken the same route
- Make sure you know when your current funding ends – start thinking about your options well in advance ~ **18mths before** for Fellowships
- UK or overseas?
- Postdocs, science specialists in a larger project
- Fellowship(s) on the pathway to an academic position
- Academic post
- Role outside of academia
- **It's not a one-way choice**





Beyond academia

Transferable skills

Top 10 skills of 2025

-  Analytical thinking and innovation
-  Active learning and learning strategies
-  Complex problem-solving
-  Critical thinking and analysis
-  Creativity, originality and initiative
-  Leadership and social influence
-  Technology use, monitoring and control
-  Technology design and programming
-  Resilience, stress tolerance and flexibility
-  Reasoning, problem-solving and ideation

Type of skill

-  Problem-solving
-  Self-management
-  Working with people
-  Technology use and development

Beyond academia (+ non-academic roles in academia)

- Funding councils, policy makers
- Other public sector roles
- Industry – research or managerial, large or small
- Start your own spin out
- Research support in a University

- Seek advice from your University Careers Service
- Networking - who do you know who knows the space you want to be in?
- Further information in later discussion panels

Staying in academic research?

Special considerations of HEP, PP & big collaborations

- Large scale experimental work is often defined by national and international strategies, set for many years at a time
- Roles are defined in these programmes for investigators, postdocs, scientific and technical support staff
- Useful if your 5-10 year plan involves contributing directly to the programme, you may have more stability than many postdocs working on smaller projects
- More difficult if you want to seek individual support through a Fellowship – you need to convince the Fellowship funder that, by supporting you, they will achieve something exciting beyond those strategies.
- **So what makes you different?**

Where to look for academic roles – PD, specialist, faculty

- jobs.ac.uk
- careersportal.co.uk/UKRI-careers
- <https://inspirehep.net/jobs>,
- <https://academicjobsonline.org/>,
- <https://atlas.cern/Discover/Collaboration/Jobs>,
- <https://atlas.cern/Discover/Collaboration/Jobs/Other>,
- <https://www.researchgate.net/jobs>,
- <https://www.eurosciencejobs.com/>,
- Faculty posts – with your University of interest
- Set up alerts
 - You never know when something good will come up
 - Develops understanding of what's needed

CVs: evidencing your fit to a role

Different roles need different CVs

Academic research and faculty roles - academic CV

- Key objective to highlight your achievements and potential as an academic researcher.
- Typically, 2 page main CV, with appendix for publications
- Illustrate how you match the selection criteria (things like: research output, future research vision, teaching experience, research funding, academic citizenship)
- Include things like training, labwork, patents, professional memberships, conference talks and posters
- Use a traditional layout and avoid anything too funky!

Industry roles - skills-based CV

- Key objective to highlight your achievements and potential as a professional.
- Typically, 2 page CV. List of publications likely to be irrelevant unless for a research role – condense this information hard.
- Illustrate how you match the selection criteria using activities from work or personal life.
- Avoid using academic language and pitch things you are proud of (e.g. publications/conference talks) in terms of the skills (communication/presentation etc) rather than citations.
- Depending on employer can be more creative with layout

Fellowships – the Narrative CV, R4RI

- A recent innovation adopted by many UK funders
- Provides the evidence that you have the right experience, skills & expertise to deliver your proposed science programme
- Enables you to discuss career highlights in depth – rather than be measured by number of publications!
- Typically, 1000-1500 words of narrative prose
- Think about collating evidence now, whilst you still have time to work on gaps (*goes for other CVs too!*)

UKRI format Narrative CV, R4RI

1. The generation of knowledge



...to the generation and flow of new ideas, hypotheses, tools or knowledge

e.g. skills acquired from past research projects, key outputs such as data sets, software, and research and policy publications.

3. The wider research community

...to the research community

e.g. across disciplines, institutions, and / or countries, commitments such as editing, reviewing and committee work, positions of responsibility, aiding improvement of research integrity or culture, or strategic leadership in influencing a research agenda.



...to the development of others and maintenance of effective working relationships

e.g. management, supervision, or mentoring critical to the success of a team or its members, or strategic leadership in shaping the direction of a team, organisation, company or institution.

...to broader research/innovation-users and audiences towards wider societal benefit

e.g. engagement across the public and/ or private sectors or with the wider public, research which has contributed to policy development or public understanding, other impacts across research, policy, practice and business, and other research users.



Narrative CV, R4RI,

- [UKRI guidance](#)
- Similar material will be needed for other funders like Royal Society, even if presentation format is different

All CVs

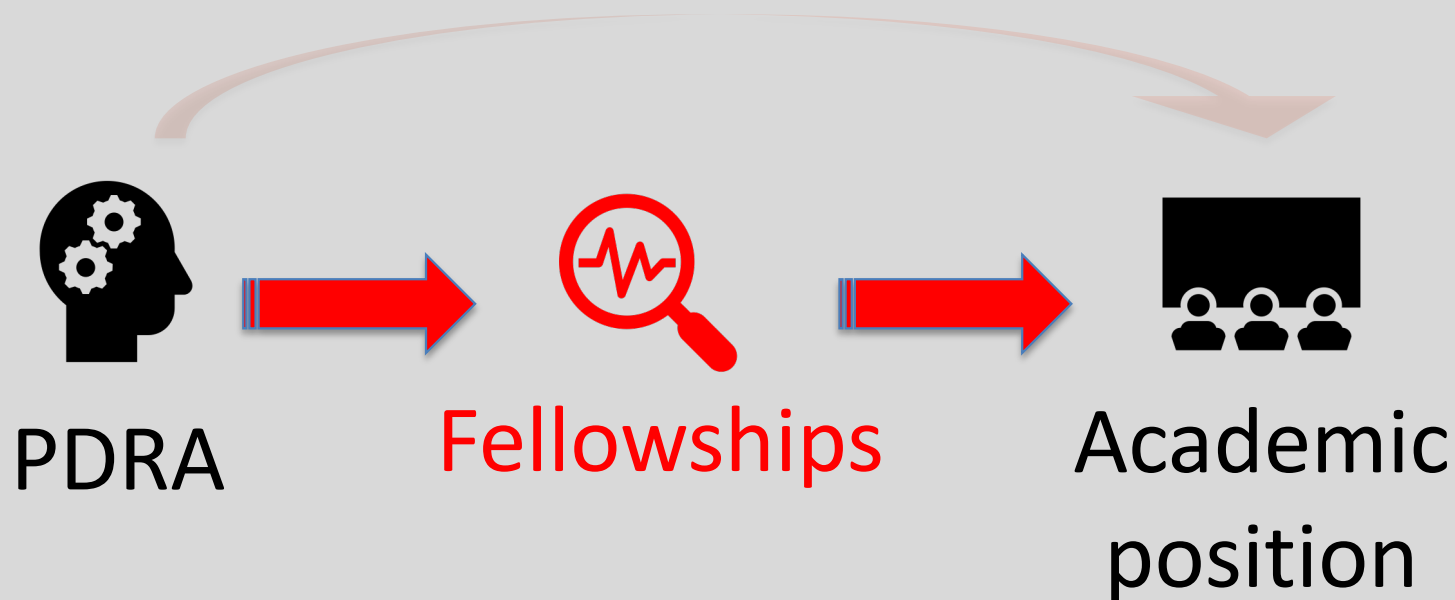
- Check exemplar requirements from roles you find interesting
- Collate your evidence now
- Look for gaps and fill them **
- Draft an appropriate CV whilst you have time – the first time is the worst and updating becomes easier!
- Show draft to and seek advice from a professional – careers service or research facilitator on improving content and layout

**Describing your personal development plan is also important when it comes to writing Fellowship applications

Fellowship Schemes

Why a fellowship?

- A fellowship is an **individual research award**. It provides you with resources to pay your salary, research and travel expenses.
- A fellowship or multiple fellowships are key stepping stones to research independence, growing a group and on to a permanent academic career.



Postdoctoral level fellowship (2-3 years)

- Typically NSP 29-36 salary
- Fellowship to establish research independence
- Need a host group to sit within

Independent level fellowship (5-8 years)

- Typically NSP 37-43 salary
- Establishing your own research group, you are now eligible to -
 - Supervise students
 - Supervise PDRAs
 - Apply for further external grant funding as a PI (e.g. to UKRI, Leverhulme etc)

Postdoctoral Fellowships

- [1851 Research Fellowships](#) – up to 3 years post PhD experience when fellowship would start. (Jan deadline)
- [Marie Curie Postdoctoral Fellowship](#) – mobility component, spent less than 12 months in the host country up to September deadline in preceding 36 months. (open, Sep d/I)
- [Royal Society Career Development Fellowship](#) – for researchers of Black or Mixed Black heritage (Jan d/I)
- [Royal Society Newton International Fellowships](#) – for non-UK scientists based outside the UK, to come to the UK (March d/I)
- *Lots more Fellowships at the end of this presentation*



THE ROYAL SOCIETY

Independent Fellowships

- [Royal Society University Research Fellowship](#) – between 3 and 8 years post PhD experience (opens July, Sep deadline).
- [Royal Society Dorothy Hodgkin Research Fellowship](#) – up to 6 years FTE post PhD experience. Current and ongoing need for flexibility/part time working for example disability, chronic health condition or caring responsibilities. (Nov deadline).
- [UKRI Future Leaders Fellowships \(UKRI\)](#) - Ad hoc calls, round 10 not yet announced, round 9 internal selection closed.



THE ROYAL SOCIETY



UK Research
and Innovation

Independent Fellowships

- [STFC Ernest Rutherford Fellowship \(UKRI\)](#) – Astrophysics, planetary science, particle physics, accelerator science and nuclear physics (call open, 1st Oct deadline)
- Universities given a capped number of applications
- [Institutional quotas and deadlines](#)



Science and
Technology
Facilities Council

ERF experience vs success

ERF years of postdoctoral experience: awarded

Call	Postdoctoral experience				Average Per call
	1 to 3 years	4 to 6 years	7 to 9 years	10 years plus	
ERF 2014	2	7	1	2	6
ERF 2015	2	8	2	0	5
ERF 2016	0	6	5	2	7
ERF 2017	1	5	5	1	6
ERF 2018	0	6	5	0	6.2
ERF 2019	0	4	6	0	6.6
ERF 2020	0	5	3	2	7.2
ERF 2021	0	7	3	0	6
ERF 2022	0	5	5	0	6.6
ERF 2023	0	4	3	3	7.6

Funder – European Commission Scheme – ERC Starting Grants

- Not a fellowship, but similar to independent level, application can include funding for PDRAs and students
- Support excellent PIs at the career stage where they are starting their own independent research team or programme
- 2-7 years post PhD (if your career track is longer than this look at ERC Consolidator or even Advanced Grants)
- 5 years

[Starting Grants | ERC: European Research Council \(europa.eu\)](https://ec.europa.eu/erc/)



Fellowship Proposals

How to write a good proposal

- Make it a great science story
- Sell yourself as a leader of the future
- Deliver on funder strategy
- Show work connects to and is needed by the wider research community
- Explain its impact on the world
- Get the paperwork right!

- ... talk to your University's Facilitation Team!

Story-telling, capture the imagination!

- The research inspires you – how do you pass that on to your reviewers?
 - Why should this research be done? – problem to fix, idea to explore, what difference will it make
 - Why should it be done now? – timeliness, capability
 - Why should you be the person to do it? – track record, future leadership
 - Why pick the host institution?
- In a competitive world, you have to make it a “no brainer” for you and your project to be picked

Strategy – learn to love your funder!

- How can you help them deliver on their priorities?
 - Do you know what they are?
 - How does your research fit in?
- Read their website, sign up for news emails
- Look for Strategic Plans, Programme Reviews
- Research national importance, industrial/end user needs
- What else is the funder supporting in this area?
 - Use UKRI Gateway to Research to explore existing work (<https://gtr.ukri.org/>)

Science – context is everything

- What's the global & national context? – state-of-the-art
 - Who else is working in this area?
 - How do you complement/compete with them?
- Whose input do you need for your work? – collaborators and partners
- Who needs the outcomes of yours? – beneficiaries (more on what's meant by “beneficiaries” in the end slides)

Faculty applications – e.g. Assistant Prof/Lecturer

- Research statement: Now looking much longer term
 - Short term (First 5 yrs): as with fellowship apps, specific details, more focus here.
 - Medium term (Following 5 yrs): less specific but bigger picture.
 - Long term (the rest of the career!): big picture, even less specific, how will you be leading amazing research for the future of our field?
 - Interview process likely to involve giving a research seminar
- Teaching statement
 - Experience, interests, philosophy.
 - How will you contribute to the university's undergraduate teaching programme and improve it?
 - Interview also increasingly likely to involve a test of the teaching element: e.g. giving a lecture
- EDI statement (could be linked with above)
- See e.g. <https://www.careers.cam.ac.uk/academic-application-toolkit>

Conclusions

- Prepare in advance
- Take time to think about where you want to go
- Explore potential employers and funders
- Research what makes a good fit to your dream role
- Look at your fit and gaps honestly – then fill the gaps!
- Seek help from people who've gone before you and professional support
- Don't expect life to be a [straight line!](#)

Further resources and institutional information

Other Fellowships to explore

International funders supporting postdoctoral fellowships in the UK

There are also a range of international funders who can fund fellowships that might be applicable to you as an individual. For example...



SWISS NATIONAL SCIENCE FOUNDATION

[Postdoc.Mobility \(snf.ch\)](https://www.snf.ch)

CARLSBERG FOUNDATION

[Carlsberg Foundation Internationalisation Fellowships | Carlsbergfondet](#)



[DFG, German Research Foundation - Walter Benjamin Programme](#)

Other Fellowships to explore

- [AI Schmidt Postdoctoral Fellowship](#) – aims to drive innovative use of Artificial Intelligence in STEM research. Oxford, Imperial, Cornell, California, Chicago, Michigan, NTU Singapore, Uni of Singapore, Toronto. See individual Universities for their own processes and deadlines.
- CERN Research Fellowships
<https://jobs.smartrecruiters.com/CERN/743999993981938-research-fellowship-experimental-physics>
- DESY Experimental Particle Physics Fellowships
https://www.desy.de/career/career_programs/fellowships/experimental_particle_physics/index_eng.html



Both 2 Years, March+September application rounds each year

Other Fellowships to explore

- Oxbridge College Stipendiary Junior Research Fellowships
<https://www.jobs.cam.ac.uk/college/>,
<https://collegevacancies.web.ox.ac.uk/home>
All/Varying subjects, 3 years, Summer/Autum applications for following October start.
- LBNL Chamberlain Fellowships
<https://www.physics.lbl.gov/owen-chamberlain-fellowship/>
5 years., up to 2 years post PhD
- Chicago Fermi Fellowship
<https://efi.uchicago.edu/fellowships/>
1+3 years, <7 years post PhD.
- Chicago Grainger Fellowships
<https://physics.uchicago.edu/academics/postdoctoral-programs/grainger-fellowship-in-experimental-physics/>
2 years

**More content to think about for
applications**

Benefits & Beneficiaries - Academic

- Benefit from skills learned and knowledge generated
- Think about your ‘circles of influence’:
 - yourself, students, staff, colleagues, other departments,
 - other UK universities, national strategic investments
 - international groups
- Include funds in your proposal to reach these through academic conferences, workshops, visits, etc.
- Collaborators may help define the shape of your project

Benefits & Beneficiaries – societal & economic impact

- Understand the difference between:
 - Impact - who benefits? economy, society
 - Pathways to impact - how will you reach them?
- Include budget in proposal to support pathways, e.g. non-academic conferences, materials for outreach, etc.

Personal development & institutional support

- Many funders ask for development statement – it's OK to be honest about gaps.
- What do you hope to do in future - your personal vision for your research and your career? What help do you need to achieve your goals?
- Check out training courses from your University and external providers.
- Collaborators and mentors, research facilities, professional support staff.

Tactics – the answer's in the question

- Read the guidance in depth.
- Check the marking scheme – where is the funder's emphasis? Make sure you hit all the points!
- Ask colleagues to read through and mark you against the scheme before you submit – whilst there's still time to act on feedback.

Tactics – dealing with documents

- Write the supporting material first – lay summary, beneficiaries, CV, budget justification, work plan/Gantt chart
- Then write the case (cross-referencing to supporting material if you need space)
- Facilitation team in your host University can advise & feedback

Career guidance by institution

Birmingham

Other material behind institutional wall

<https://www.birmingham.ac.uk/university/colleges/eps/percat/training-and-development>

<https://www.birmingham.ac.uk/schools/physics/phd/fellowship-schemes>

Cambridge

<https://www.careers.cam.ac.uk/careers-support-postdocs>

<https://www.careers.cam.ac.uk/careers-support-phd-students>

<https://www.youtube.com/c/universityofcambridgecareersservice/playlists>

Edinburgh

<https://institute-academic-development.ed.ac.uk/research-roles/research-only-staff/career-management>

<https://support-for-researchers.ed.ac.uk/online-guides>

<https://support-for-researchers.ed.ac.uk/funding-research-impact/finding-funding>

<https://support-for-researchers.ed.ac.uk/funding-research-impact/fellowships>

Glasgow

<https://www.gla.ac.uk/myglasgow/ris/researcherdevelopment/>

Imperial

<https://www.imperial.ac.uk/postdoc-fellows-development-centre/your-career/academic-career-paths/>

<https://www.imperial.ac.uk/postdoc-fellows-development-centre/your-career/non-academic-career-paths/>

<https://www.imperial.ac.uk/natural-sciences/research/funding/research-fellowships/>

KCL

<https://www.kcl.ac.uk/research/research-environment/professional-development>

<https://www.kcl.ac.uk/careers/supporting-you>

<https://www.kcl.ac.uk/research/funding/fellowships-for-early-career-researchers>

Manchester

<https://www.researcherdevelopment.manchester.ac.uk/researcher-development-for-research-staff/fellowships-and-grants/>

<https://www.researcherdevelopment.manchester.ac.uk/online-resources/>

<https://www.physics.manchester.ac.uk/research/fellowship/>

Oxford

<https://www.careers.ox.ac.uk/job-search-and-application>

<https://www.careers.ox.ac.uk/academic-applications>

<https://www.physics.ox.ac.uk/research/research-funding-support>

QMUL

<https://www.qmul.ac.uk/queenmaryacademy/postdocs/>

<https://www.qmul.ac.uk/careers/our-support/for-phds-and-early-career-researchers/>

<https://www.qmul.ac.uk/spcs/research/fellowships/>

RHUL

<https://www.royalholloway.ac.uk/research-and-teaching/departments-and-schools/physics/research/opportunities/>

<https://intranet.royalholloway.ac.uk/doctorsal-school/researcher-development/researcher-development.aspx>

Sheffield

<https://www.sheffield.ac.uk/careers>

<https://www.sheffield.ac.uk/physics/fellowships>

Sussex

<http://www.sussex.ac.uk/staff/research/researchstaff/funding>

<http://www.sussex.ac.uk/staff/research/researchstaff/funding/fellowship-opportunities>

<http://www.sussex.ac.uk/staff/research/researchstaff/traininganddevelopment>

<https://www.sussex.ac.uk/tpp/vacancies>

UCL

<https://www.ucl.ac.uk/mathematical-physical-sciences/research/research-funding-and-support>

<https://www.ucl.ac.uk/physics-astronomy/research/research-fellowships>

Warwick

<https://warwick.ac.uk/fac/sci/physics/research/epp/opportunities/jobs/>

https://warwick.ac.uk/fac/sci/physics/intranet/career_development/