

Building a research career

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Science & Technology
Facilities Council



Disclaimer

- I am an Astronomer.
- I work in large astronomy collaborations.
- I am not an expert in getting funding (or building careers!)
- I am not special.
- I am not average.

What would I tell my young(er) self?

Funding & me

- 2000-2004: MPhys in Astrophysics (University of Edinburgh)
Applications: 2 summer placements (as a student), 1 PhD fellowship. 1 successful (33%).

- 2004-2008: PhD in Astrophysics (University of Edinburgh)
Applications: 10 jobs, 2 fellowships, 2 prizes. 5 successful (35%)

- 2008-2013: Post-doctoral researcher/Fellow (University of Portsmouth)
Applications: 5 fellowships, 1 visiting scholar fellowship, 1 research grant. 2 successful (28%)

- 2014-now: Advanced research fellow (University of St Andrews)
**Applications: 1 fellowship, 2 research grants, 1 prize. 1 successful (25%)
3 summer placements (as a supervisor), 3 successful (100%)**

All success is unlikely

For Women
in Science



FONDATION
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A biased view of what works

- ***Support***: seek strong, critical and encouraging mentorship. This is *your* responsibility.
- ***Practice writing***: start writing applications early in your career - from summer placements to small grants, every little bit of practice helps.
- ***Practice reading***: be on the other side (panels, SOCs, volunteer to read your friends' proposals, refereeing).
- ***Practice communicating*** your science to those who don't (yet) care. Public engagement is wonderful for this.
- ***Be aware*** of funding opportunities.
- ***Be aware*** of your funder's priorities.

UK Astronomy key science priorities

(from AAP report for the 2013 STFC Programmatic Review)

- Life in the Universe
- The formation of stars and planets in the MW and other galaxies
- Stellar evolution and stellar populations
- The formation and evolution of galaxies
- The dark ages and first light
- Precision cosmology
- Extreme astrophysics

Focus on your science

- Take **ownership** of your research.
- Don't lose sight of the big picture - **engage** with the community and the public.
- Get **feedback** on your science: collaborations, conferences, talks, chats over coffee, social media.
- Let your **curiosity** drive you.
- Be **ambitious**.

Put yourself first

- Dealing with **rejection** is difficult - try not to take it personally (but take feedback in board).
- Peer **assessment** (funding applications, peer review, feedback at conferences, etc) is a fundamental part of academic life - get **comfortable** (warning, this is *hard*).
- Foster **nurturing** science relationships and ditch toxic ones.
- Insecurity and doubt are good things, but if it gets out of control, **seek help** (if anything gets out of control, seek help).
- The job *has* to work for you.

Building a research career - beyond funding

- ***Collaborations and leadership positions***: networking and exposure, experience in managing people, leadership of large science projects.
- ***Broad science focus***: increases exposure, keeps things interesting, expanded skill set.
- ***Outreach and public engagement***: communication skills, management experience, exposure to other fields and communities, often direct route to higher management.

Courage.



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ALL I WANT FOR CHRISTMAS IS:

MY TWO FRONT TEETH 7%

MY FIRST TWO DRAFTS 44%

MY TWO FIRST GRANTS 49%

Poll conducted on Twitter. 1000 respondents.

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