

Academic Bag of Tricks 2017

How to land your first postdoc job!

Daniel Noble

What is a postdoctoral position?



Why are postdocs important?

- Broaden your knowledge and skills
 - Can help you establish a new and independent line of research
- Experience working in different labs and with different mentors
 - Research groups can be structured quite differently
- Gives you more time to publish your PhD work and develop track record

Do you need one?



What types of postdocs exist?

1. **“Advertised” Postdocs**
2. **“Write your own” Discovery Postdoc**
3. **Internal University Fellowships**
4. **National and International Fellowships**

What types of postdoc exist?

- **“Advertised” Postdocs**
 - Usually money from a PI’s grant
 - Can sometimes be hard to develop your own research program as goals of grant are priority!
 - Great for learning new skills, buying some time to write grants and publishing your work
 - Great for working in teams to achieve the same goals
 - Can find these on University and society (e.g. ASSAB, ASH) webpages, mailing lists (e.g. EvolDir)

What types of postdoc exist?

- **“Write your own” Discovery Postdoc**
 - Money from a PI’s grant, but you help write the grant and work in your salary
 - Less restrictive
 - Better alignment with your research interests
 - Great for learning grant writing skills, buying some time to write fellowships and publishing your work
 - Great for working in teams to achieve the same goals
 - E.g. – ARC Discovery Postdocs, ARC linkage grants

What types of postdoc exist?

- **Internal University Fellowships**
 - Usually 1-3 year fellowships funded by internal University funds
 - Pays your salary and also gives you some research money (\$30-50,000 depending on University)
 - Lots of freedom for your research
 - Apply for externally funded money (e.g. ARC DECRA)
 - Great for learning new skills, writing grants and publishing your work
 - Extremely competitive

Internal University Fellowships

- Some Universities in Australia that offer these include:
 - University of New South Wales
 - Sydney University
 - Macquarie University
 - Monash University
 - Deakin University
 - James Cook University
 - University of Queensland
- Be proactive in finding closing dates
- Contact mentor early.
- Applications can vary a lot!

Suggestions on how to get University Fellowships

- I’m no expert and it’s not always clear but some suggestions:
1. Choose mentor **CAREFULLY**.
 2. Highlight your **skills**
 3. Identify how your research fits with your mentors, that of the department, and University.
 4. Be lucky! These are highly competitive and many excellent candidates miss out!

What types of postdoc exist?

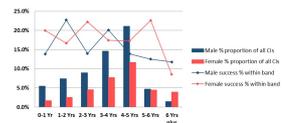
- National and International Fellowships**
- **Australia** – Australian Research Council (ARC)
 - Discovery Early Career Research Awards (3 years; 2 chances within 5 years of PhD)
 - Human Frontiers
 - **Canada** – Natural Sciences and Engineering Research Council (NSERC)
 - NSERC Postdoctoral Fellowships (2 years; 1 chance within 2 years PhD)
 - Banting Postdoctoral Fellowships (2 years)
 - **USA** – National Science Foundation
 - NSF Postdoctoral fellowships (2-3 years)
 - Smithsonian Institution Fellowships
 - **Europe** – European Research Council
 - Marie Curie Fellowships (2 years)

ARC DECRA

D8.1 Selection Criteria
 D8.1.1 Proposals will be assessed and ranked using the following selection criteria:

- a. Proposed Project Quality and Innovation 35%
 - Does the research address a significant problem?
 - Is the conceptual/theoretical framework innovative and original?
 - What is the potential for the research to contribute to the Science and Research Priorities?
 - Will the aims, concepts, methods and results advance knowledge?
- b. DECRA Candidate 40%
 - Research opportunity and performance evidence (ROPE) and
 - Time and capacity to undertake the proposed research.
- c. Feasibility 10%
 - Do the Project’s design, participants and requested budget create confidence in the timely and successful completion of the Project?
 - Is there an existing, or developing, supportive and high quality environment for this Candidate, their Project and for Higher Degrees by Research students where appropriate?
 - Are the necessary facilities available to complete the Project?
- d. Benefit and Collaboration 15%
 - Will the completed Project produce significant new knowledge and/or innovative economic, commercial, environmental, social and/or cultural benefits to the Australian and international community?
 - To what extent will the DECRA Candidate build collaborations across research organisations and/or industry and/or with other disciplines both within Australia and internationally?
 - Will the proposed research be cost-effective and value for money?

16.7% Success Rate overall in 2016/2017
<http://www.arc.gov.au/discovery-early-career-researcher-award>



Writing a good proposal

To write a good proposal you must:

- Explicitly outline the hypotheses and the predictions you wish to test
- Explicitly detail how you will test these hypotheses
- Critically analyse the significance of your research
- Really know the background to your field
- Really know what it will take to successfully complete the project in terms of money, time and equipment.

Writing a good proposal

- First page is important
- Know your audience
- Think big (but not too big)
- Highlight how your track record puts you in an excellent position to tackle the theoretical framework
- Pick a model system!



What does it take to land a postdoc?

1. Track record

- Publish, publish, publish! Preferably lots and in high quality journals



- Early stages put more emphasis on number of publications
- But, don't waste too much time with small papers...you should always strive to aim high
- No study is perfect
- Publish as you go
 - Nothing is complete until the world is reading about it!

What does it take to land a postdoc?

2. Grant writing skills

- Write your own grants **AS MUCH** as you can
- Fun and challenging and makes you think critically about big picture stuff
- Write a couple even...totally different ones preferably
- Re-use these grants for a fellowship or other smaller grants
- Get some help from expert grant writers!
- When you land a grant or fellowship, don't think it stops there

What does it take to land a postdoc?

3. Network and collaborate

- Extremely important, and fun!!!!
- Working in teams in a great way to learn new skills and learn from others...after all this is why we do science!
- Join discussion groups, organize workshops, conferences, have a coffee with colleagues...just talk science!
- Be mobile. Go visit someone who is doing some cool work and chat with them, start a project with them and seek out postdocs in different countries and Universities.
- Use social media outlets to highlight yours and others' work



Some last thoughts!

- It's a tough world out there. I know!
 - Funding is getting harder to come by
 - Pressures of doing science are great
 - Need to make a living too
- But don't fret!
 - Doing science is wonderful!
 - Feel privileged to have the opportunity to be doing it.
 - Don't get discouraged!
 - Rejection is normal so just have fun and learn lots
 - Neutral thinking strategies..
 - Always look at the positives and maintain optimism and enthusiasm
- Also check out:
 - <https://chrissiepainting.com/2016/07/11/teatime-tips-on-how-to-get-a-postdoc/>
 - http://biology-assets.anu.edu.au/hosted_sites/Scott/Resources-and-advice.html

