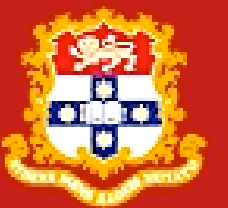


# How to get a postdoc?

## Advice for PhD students

**David Alais**  
University of Sydney

HCSnet SummerFest skills session  
December 2008  
UNSW



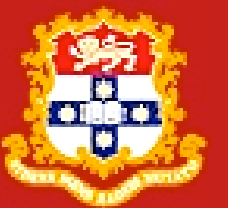
# How to get a postdoc? Overview

- What is a postdoc?
- Different kinds of postdocs
- Why do a postdoc?
- How to get a postdoc?
- Things to consider when choosing where to postdoc
- Tips for your postdoc application



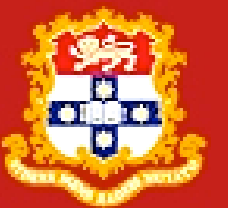
# What is a postdoc?

- A postdoc is a junior scientist, requires PhD
- More advanced than PhD -- independent research
  - It's not directed research; not (closely) supervised
- Can be a junior academic position
  - But 'research-only' academic, i.e., it's not a teaching position
  - Usually only those on ARC fellowships
- In Australia, salary starts at level A, step 6
  - (approx. \$66,000)



# Salaried postdoc researchers

- These are advertised positions from cashed-up labs
  - ▶ Advertising can be official (conferences, journals), or
  - ▶ Unofficial (word of mouth between lab heads and colleagues)
- You work on projects already running (or starting up)
- Advantages:
  - ▶ More common, easier to get.
  - ▶ If an on-going project, momentum is good for productivity
  - ▶ Jobs come up any time of year.
- Disadvantages:
  - ▶ Less room to be independent in your research
  - ▶ Tough if you're the 'start-up' postdoc.
- In sum: a good starting point



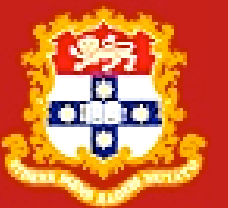
# Postdoctoral Fellowships

- Requires a successful grant application
  - (e.g., an APD application to ARC)
- Advantages:
  - Hard to get, but more prestigious (already a grant on your CV)
  - Self-funded (your own salary, plus some research funds)
  - Independence: You're the boss! Work on your own research project
- Disadvantages:
  - It's a slow process: takes about a year and lots of planning
  - Only one application round per year (late Feb, for ARC)
  - 1-2 years' postdoc experience needed to be competitive
  - Takes a 2 months to write application (better spent writing a paper?)
- In sum: Something to aim for while in your 1st postdoc



# Why do a postdoc?

- Because you want a career in research & academia
  - A postdoc is ‘overkill’ in any other career path
- Doing a postdoc is the standard path into academia
  - Very rare to get a lectureship without one
- A postdoc expands your a research profile
  - Gives you new areas of expertise; new skills
- A postdoc expands your publication list
  - Gives you a shot a future grant funding, or future APD
- Consider doing two postdocs!
  - You can never have too much research



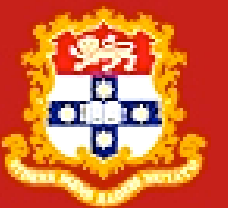
# How to get a postdoc? Have a plan!

- Have a plan: don't just drift through your PhD
- Find out the answers to these questions:
  - ▶ Where do I want to be in 5 years?
  - ▶ What skills can I get in my current lab? (do I have them all?)
  - ▶ What other skills do I need in my field?
  - ▶ What adjacent fields could I move into?
  - ▶ Which lab is best in that field?



# How to get a postdoc? Have a plan!

- To answer these career questions:
  - Talk to your supervisor & other staff about career advice
  - Talk to postdocs & other PhDs
- Start planning early
  - By year 2 of PhD, have a plan sketched out
- Know where you want to go
  - ... it'll make getting there so much easier



# How to get a postdoc? The secret is ...

- Networking!

- ▶ Go to conferences and talk to postdocs and other researchers
- ▶ How did they do it? What did they learn? What would they do differently?
- ▶ Which labs are doing related work? Get to know those guys!

- Networking!

- ▶ Approach directly senior members of labs you'd like to work in

- Networking!

- ▶ Visit other laboratories. See what they are doing. Present your own work?
- ▶ Ask your supervisor to make the first contact.



# Who to approach for a postdoc?

## The secret is ...

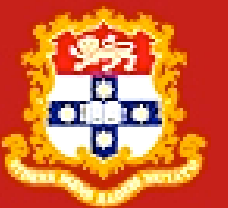
- Money!
- Who's got the money to employ a postdoc?
- To find out, go to ARC website:
  - ▶ Successful grant winners over last couple of years can be found here:
  - ▶ [www.arc.gov.au/ncgp/dp/dp\\_outcomes.htm](http://www.arc.gov.au/ncgp/dp/dp_outcomes.htm)
  - ▶ You'll find a description of the grant, who's on it, & how much they got
- Don't hesitate: It's public information (it's public money!)



# How to get a postdoc?

## What the employer wants

- Skills!
  - ▶ Technical skills (programming, etc); Stats, experimental design, etc
  - ▶ Independent research
  - ▶ Employed postdocs often brought in to run/manage a research project
- Make sure you have skills to offer
  - ▶ Know your skills
  - ▶ Acquire new ones during your PhD
  - ▶ What skills are needed in your intended Postdoc area?
- A postdoc may be sought to bring new skills to a lab



# How to get a postdoc?

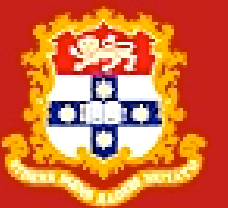
## What do you want?

- Skills, publications & mobility
- Skills:
  - ▶ Go where you can get new skills! Large lab if possible.
  - ▶ Don't be a one-trick pony (very limiting later)
- Publications:
  - ▶ Go to an active lab, with proven publication record.
  - ▶ Join a project already running (starting a new project can be slow!)
  - ▶ Try to work on something novel (old stuff doesn't get cited)
- Mobility:
  - ▶ Changing labs/research fields/countries is a key to research success
  - ▶ Leave your comfort zone! Don't become inbred



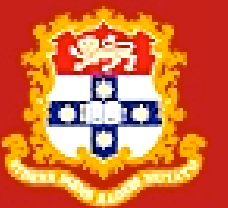
# Important considerations

- What does the supervisor want from me?
  - ▶ Will I be independent?
  - ▶ Will I be a cog in a machine?
- Will I be part of a research community, or isolated?
  - ▶ You need colleagues!
  - ▶ Are there regular lab meetings?
- How long is the contract?
  - ▶ 1 year is too short
  - ▶ A two-year postdoc is ideal



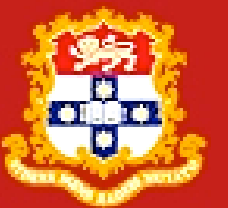
# Important considerations

- Does the lab have the equipment I would need?
  - ▶ If not, what funding options are there?
- What is the lab culture?
  - ▶ Is it collective? splintered?
  - ▶ What training opportunities are there?
- Find a lab that is growing & expanding
  - ▶ Some labs are past their peak & waning
  - ▶ People leave, funds dry up. Avoid these!



# Applying for the job

- Don't just send a CV
  - ▶ Too hard to stand out from the crowd
- Include a letter with clear statements of:
  - ▶ The skills you would bring to the lab
  - ▶ The skills you hope to gain from the lab in return
  - ▶ Outline how your research interests intersect with the lab's (even sketch possible lines of research)
- Back all this up with a visit
  - ▶ There is no substitute for personal contact! Offer to give a talk
- If you follow a career plan (slides 6 & 7), this will come together easily



# A career plan in five points!

- 1) Build a skills base
  - Make yourself employable
- 2) Network!
  - Get to know the key players
- 3) Do something new in your first postdoc
  - Novel work has appeal when writing grants
- 4) Write an ARC APD application
  - The host lab will want you; will help you
  - See applications from previously successful APDs
- 5) The world's your oyster!
  - Congratulations! You are launched on an academic career

