

Funding Opportunities

HDR Seminar Series, Sep 4th 2018

Presented by Andre Kyme

*Lecturer, Biomedical Engineering, School of Aerospace, Mechanical & Mechatronic Engineering
ARC DECRA Fellow*

E: andre.kyme@sydney.edu.au

T: 9351 2260

Room S428 Mechanical Engineering (J07)



Some Key Questions

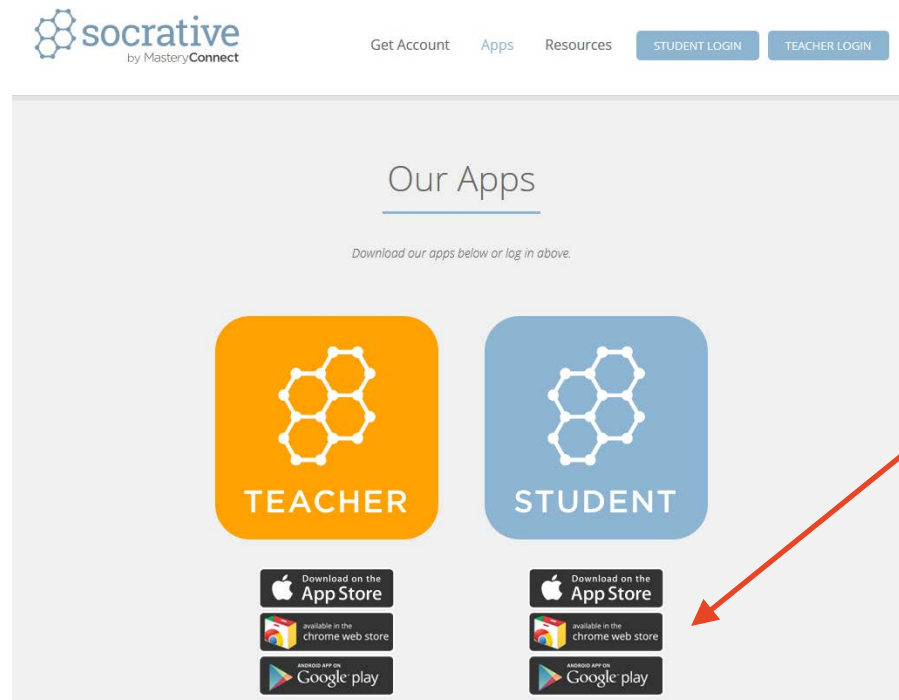
1. What funding opportunities are there?
2. Which opportunities are relevant to me at my particular stage?
3. How should I think about this whole issue of funding?
4. How can I best take advantage of the various funding opportunities?

Survey

If you've installed the Socrative App: Start the App, go to Student Login

Join room: **AK1036**

To install the Socrative App go to: <https://www.socrative.com/apps.html>



Select from options

Outline

1. My funding story

2. Funding opportunities internally and externally:

Scholarships

Fellowships

Grants

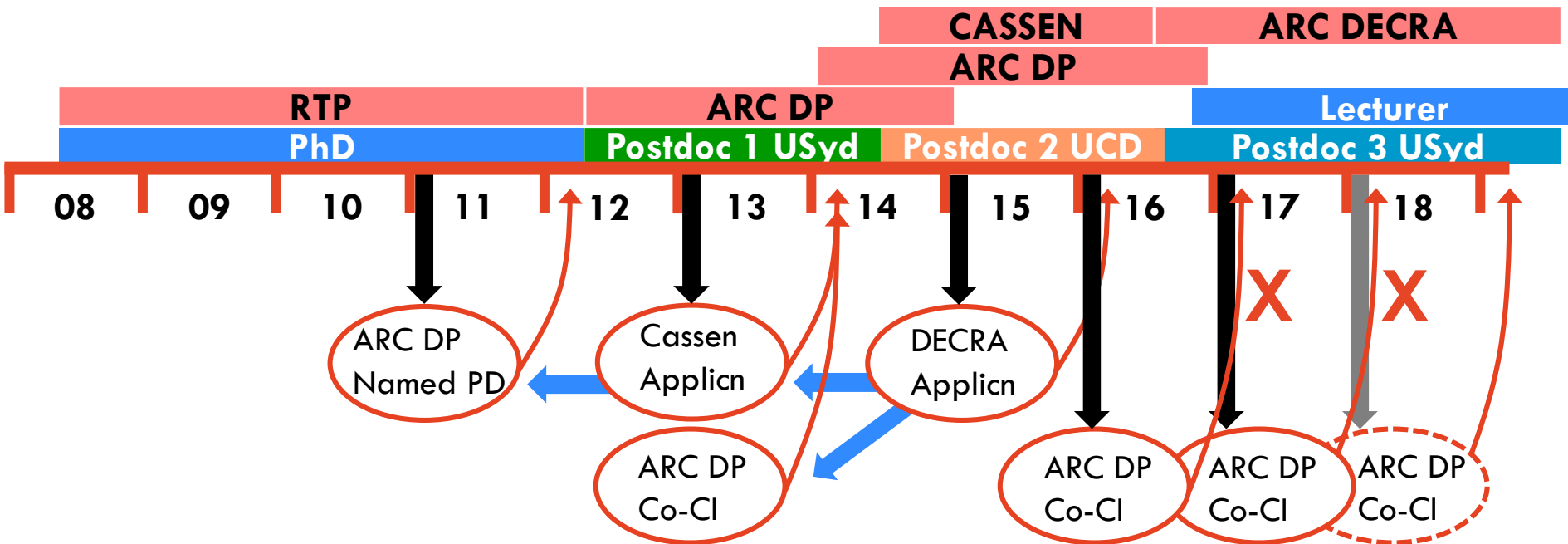
Industry funding

3. Top tips for funding opportunities

My Funding Story

Position	Funding
PhD (USyd, 2008-2012)	APA (now called RTP); \$20,000 in 2008, \$23,700 in 2012
	Chancellor's Committee Scholarship (no app) (\$2k/yr)
	Physics top-up (\$500/yr)
Postdoc 1 (USyd, 2012-2014)	Funded by 3 yr ARC Discovery Project Helped write the grant; I was the 'named postdoc'
	Co-CI on successful 3 yr ARC Discovery Project (2014-2016)
	Cassen Postdoctoral Fellowship (USA Society of NMMI) 2 yr (renewable after 1 year), US\$50k / year salary (taxable)
Postdoc 2 (UC Davis, 2014-2016)	Applied for postdoc 3 (DECRA) after 6 mo (in '15 for '16 funding)
	UC Davis internal seed grant (US\$10k)
	Applied for 2017 ARC Discovery Project as Co-CI Unsuccessful – top 10% > USyd Bridging Support \$30k, 1 yr
Postdoc 3 (USyd, 2016-)	ARC DECRA, 3 yr salary + equipment/travel budget (\$63k)
	Applied for AMME Lecturer role after receiving DECRA
Lecturer (USyd, 2016-)	FEIT Newly Appointed Staff Research Grant (2016, \$36.5k)
	Applied for 2018 ARC Discovery Project as Co-CI - Unsuccessful

My Funding Story



What Funding Opportunities are Available?

- **USyd scholarship funding**
- **USyd postdoctoral funding**
- **ARC and NHMRC fellowships & grants**
- **USyd and ARC industry-based funding**
- **Other external funding** (Australia-based and international)

University of Sydney Scholarships

Website: <http://sydney.edu.au/scholarships/research/>

(there is a link here to receive a regular email bulletin on current scholarships)

Australian Government Research Training Program (RTP) Scholarships (formerly APA)

University of Sydney Postgraduate Awards (UPA)

- PhD stipend (~27k/year tax free for 3 years); awarded year round; re-applications encouraged
- **Range of top-ups** available for domestic students (no application required): VCR, Val Street Scholarship, USyd Merit Awards, Alumni Scholarships, AE & FAQ Stephens Scholarship
- RTP for international students (tuition + stipend); automatic consideration for USYDIS

University of Sydney Grants-in-Aid (GIA)

- For postgraduate students
- \$500-\$2500 to support a short-term research trip overseas (not solely conference)
- Check eligibility, including the *research area* being targeted

University of Sydney Scholarships

Postgraduate Research Support Scheme (PRSS)

- For Masters and PhD students
- PhDs allowed 3 successful applications/candidature; Masters allowed 1
- Funding for various categories:
 - Conference expenses (up to \$3k for Europe/US, up to \$2k for Australia/Asia)
 - Specialist services, field expenses, s/w, computers/equipment (\$200-\$1200)
 - Thesis production (up to \$600)
- 1 round per year, can apply in 1 category per round

Overseas Scholarships

Scholarships for International Students

Faculty-Based Scholarships

Research Scholarships Database

Access via

<http://sydney.edu.au/scholarships/research/>

University of Sydney Postdoctoral Funding

University of Sydney Fellowships

<http://sydney.edu.au/research/join-us/university-of-sydney-fellowship-scheme.html>

- Extremely competitive (10 Fellowships to be awarded in 2019)
- 3 years salary + \$25k start-up; \$30k bonus if awarded a fellowship in the first 2 years
- PhD awarded between 1st Jan 2013 and 1st Jan 2019
- Strong preference given to applicants joining USyd from another organisation in Australia or from overseas
- Applications should focus on one of the USyd multidisciplinary initiatives (e.g. BMC, CPC, AINST, Centre for Translational Data Science, ...)
- Applications for this round closed on Aug 19th

Advertised postdoctoral (and other academic) opportunities

<https://sydney.nga.net.au/cp/index.cfm?event=jobs.startJobSearch>

- Search using various filters or click on “Academic jobs”

ARC & NHMRC Postdoctoral Funding

Key links:

<https://www.arc.gov.au/grants> (ARC)

<https://www.nhmrc.gov.au/grants-funding/apply-funding> (NHMRC)

Note: *“From 30th April 2017 all accountable authorities must use **GrantConnect** to publish all Grant Opportunities and Grant Opportunity Guidelines (funding rules)”*

<https://www.grants.gov.au/> (search, subscribe) – search both **“Grant Opportunities”** and **“Forecast Opportunities”**

ARC Postdoctoral Funding

ARC Discovery Early Career Researcher Award (DECRA)

- Competitive 3-year award covering salary + up to \$40k/year in project costs
- Must have PhD to apply
- Can apply twice within 6 years of PhD conferral date
- Any subject area
- Selection criteria:
 - Project 35%
 - Candidate 40%
 - Feasibility 10%
 - Benefit/collaboration 15%

NHMRC Postdoctoral Funding

NHMRC Early Career Development Fellowship

- Competitive and prestigious 4-year award covering salary
- Either:
 - PhD must be in a health-related field of research, OR
 - PhD in non-health area but proposing to undertake health-related research
- Must have PhD or be submitting by 31st December in the year of application
- At 30th June in the year of application, cannot have held PhD for > 2 years
Important: The '2 years' is calculated from the **date the PhD was passed, not conferred**
→ **small window of opportunity for this fellowship**
- Subject areas this Fellowship is particularly relevant to include:
 - Biomedical engineering
 - Computational biology
 - Bioinformatics
 - Biostatistics
 - Or if you can apply your PhD research to a key health problem

NHMRC Postdoctoral Funding

NHMRC Career Development Fellowships (CDF)

- Competitive and prestigious 4-year award covering salary
- **CDF1** – applicants typically >2 years post PhD and must be <7 years post PhD
- **CDF2** - applicants 7-12 years post PhD
- **Co-funded CDFs** are offered in partnership with organisations listed on NHMRC website*
- Mainly relevant if your research is in the following areas:
 - Biomedical engineering
 - Computational biology
 - Bioinformatics
 - Biostatistics

* In 2018 these were: **Heart Foundation, MS Research Australia, Cerebral Palsy Alliance, JDRF**

ARC & NHMRC Category 1 Grants

ARC Discovery Projects

NHMRC Project Grants

- Typically 3 years duration
- 1 application round/year (deadline ~Feb)
- Typically \$200k - \$1M total funding (salaries of PhDs/postdocs + equipment + travel)
- Rare for ECRs to be Chief Investigator (unlikely to be funded)
- More likely included as a co-Chief Investigator (i.e. further down the list, esp. NHMRC)
- Alternatively, you could be included in the grant as the (named) postdoc

University of Sydney Industry-Based Funding

CDIP Fund for Research Commercialisation

- Support for research projects with commercial potential

Industry Engagement Fund

- University strategy to improve Category 3 funding
- Make new connections with potential industry partners
- Up to \$5k/year
- Make the link; meet face-to-face; develop marketing material; low-cost prototyping
- Open all year

Industry & Community Engagement Seed Fund

- Increase level of researcher engagement with potential industry partner(s)
- Aim is to encourage Linkage Program grant funding application
- Up to \$25k/year
- Must commit to submitting a Linkage application within 24 months

Note: Schemes usually for staff – BUT you can play a role in scoping opportunities

ARC Linkage Scheme (USyd/Industry Grants)

ARC Cat 1 scheme linking USyd with government / business / industry partners

- Partners can be local or international
- Partner organisation(s) must contribute cash and/or in-kind
- ARC will match the total partner contribution (cash + in-kind)
- Proposals can be submitted anytime

Again, Linkage proposals would be submitted by academic staff – but you could play a vital role in:

- Scoping the opportunity
- Drafting the proposal
- Being included as a named co-PI or named postdoc

University of Sydney & Government-Based Funding

Useful summary link for USyd opportunities and Australian government (Cat 1) opportunities:

<https://sydney.edu.au/research/research-funding.html>

Other External Funding – Fellowships, Grants, Awards, and Scholarships

Research Professional

- Database of opportunities
- Scholarships, Fellowships, Awards, Prizes, Grants, ...
- Search with many kinds of filters (e.g. type, deadline, country, eligibility, ...)
- Worth spending an afternoon occasionally to scope potential opportunities

Website:

<https://www.researchprofessional.com/0/rr/home>

Select “**The University of Sydney**”

Enter **Unikey + password**

Search database

Top (18) Tips for Thinking About Funding Opportunities

1. There are **more funding opportunities than you think!**

Think outside the box because more people are offering money than you might realise

- Research Professional exemplifies this
- Risky to depend solely on the Cat1 players (ARC / NHMRC)
- Diversify your options and have some backups

Top (18) Tips for Thinking About Funding Opportunities

2. Pay close attention to **eligibility requirements**

Getting this wrong can waste a lot of time

Eligibility relates to:

- You (e.g. degree/stage of degree, age, discipline, male/female, ...)
- Your School / Institution (e.g. ranking)
- Your other funding (e.g. limit on number/type of concurrent grants)
- Applying multiple times
- ...

Top (18) Tips for Thinking About Funding Opportunities

3. Learn to be **Ok with failure**

Be optimistic (!) with funding applications, but also don't be too surprised with failure (funding is competitive!)

Remember that many extremely good projects and ideas miss out on being funded

Missing out can be for many reasons – but in general we shouldn't jump too quickly to the following conclusions:

- *“The system is rigged”*
- *“It's all so political”*
- *“The reviewer was a goose”*

Once we've had time to calm down, be humble enough to take feedback on board and identify ways to improve a proposal

Top (18) Tips for Thinking About Funding Opportunities

4. Many award / prize / scholarship / fellowship opportunities are **hardly contested!**

Just because an opportunity is advertised widely doesn't mean there will be a lot of applicants – you may often have a high chance of success

Top (18) Tips for Thinking About Funding Opportunities

5. Track record is a key selection criteria in most applications – so develop yours

There are lots of ways to build your track record (not just the standard ways)

- Publications
- Conference papers
- Conference attendance
- Prizes and awards
- Reviewing papers
- Obtaining small grants
- Industry engagement
- Teaching (possibly)
- Blogs
- Leadership
- Volunteering / community engagement
- ...

Top (18) Tips for Thinking About Funding Opportunities

6. Writing funding applications is **not just a means to an end**

If you see it only as a means to an end, missing out will be very depressing and make the whole exercise seem pointless

There is **inherent value in the process**

- Ideas get matured
- Careful articulation of the ideas gets drafted
- Collaborators get involved
- Unsuccessful applications can be re-used / re-submitted / re-developed
- The science can often be started in some form without the intended funding
- You're developing an important skill

Top (18) Tips for Thinking About Funding Opportunities

7. Don't underestimate the **value of a well-written proposal**

Getting funding requires a decent idea – but it must also be communicated well

Make your proposal a delight to read (flow, language, layout, ...):

- Then reading won't be taxing
- Assessors are more likely to feel favourably disposed towards it
- And more likely to overlook minor flaws (e.g. in methodology)
- Poor writing which lacks flow and coherence *creates an immediate impression* which tarnishes how the science is read (and which impacts the final score)

Getting help:

- A great resource for your writing: “The Science of Scientific Writing”, Gopen & Swan, *American Scientist*, 1990
- Make use of the Research Office – they provide excellent feedback on draft proposals

Top (18) Tips for Thinking About Funding Opportunities

8. Make sure your proposal aligns with the University / Australian strategy

- Be familiar with the latest USyd strategic plan
- USyd-based funding applications should align with areas of strategic investment – this makes a big difference in assessment
- Be familiar with local / federal government strategy for scientific research – be concrete (not vague) about how the research will advance the key areas

Top (18) Tips for Thinking About Funding Opportunities

9. Go to conferences

Attending conferences has many advantages:

- People see the quality of your work
- People get to know you
- Grow your network
- Spot potential collaborators
- Introduce yourself to key researchers who you'd potentially like to work with
- Check out the jobs noticeboard

Top (18) Tips for Thinking About Funding Opportunities

10. Don't neglect the 'small pots' of money

“Whoever can be trusted with very little can also be trusted with much...”

Being successful in obtaining smaller amounts of funding sets you up well to apply for bigger amounts

Obtaining smaller amounts of funding

- Benefits your research
- Strengthens your track record
- Shows reviewers / industry that you're proactive in seeking funding
- Shows a reviewer that people have been prepared to give you money before
- Is evidence that you can manage funding
- Is evidence of good work

Top (18) Tips for Thinking About Funding Opportunities

11. **Subscribe to (weekly) bulletins** of research funding/scholarships

You can quickly peruse these each week and note any relevant ones

A variety of bulletins are distributed:

- University
- Faculty
- Centre-specific (e.g. Brain and Mind Centre, Charles Perkins Centre)
- Can also subscribe to notifications from other universities / organisations
- Can set notifications via Research Professional (?)

Top (18) Tips for Thinking About Funding Opportunities

12. Keep the most **relevant information for opportunities close at hand**

For example, you may find it useful to maintain a spreadsheet with:

- Opportunities
- Eligibility requirements
- Other requirements
- Relevant deadlines

Top (18) Tips for Thinking About Funding Opportunities

13. Scope out **industry opportunities**

- Try scoping out potential collaboration / consultation opportunities with companies you'd like to work for – then 'pitch' ideas to your supervisor
- Requires **understanding what a company wants** and what you (and your supervisor) can offer
- An industry collaboration may be a strategic way to get a 'toe-hold' that leads to employment after graduation

Top (18) Tips for Thinking About Funding Opportunities

14. Seek **opportunities to ‘piggy back’ on grants** with senior researchers

- Schemes are generally averse to awarding big funding to junior researchers
So teaming up with senior researchers is vital
- If you’ve contributed to work for a grant submission, don’t be afraid to ask the CI if there’s a way to include you – e.g. as a co-CI or a named postdoc for a project

Top (18) Tips for Thinking About Funding Opportunities

15. Help your supervisor with grant writing

Helping to write a grant has many benefits:

- The grant could fund your next position
- You have intellectual input into the direction of the project
- It helps you practice an important skill
- It demonstrates your engagement with a project
- You can state it on your CV / other grant applications

Top (18) Tips for Thinking About Funding Opportunities

16. Keep an active list of new ideas

New ideas and research avenues will pop into your head from time-to-time (e.g. from conversations with other students/supervisor, conferences, talks, papers ...)

It's a good idea to keep **an active document detailing these ideas:**

- Summary of the idea
- Context in which you thought of it
- Potential collaborators
- Questions to resolve
- Possible next steps
- Potential funding
- ...

It doesn't have to be a mature idea – make a note of everything

Top (18) Tips for Thinking About Funding Opportunities

17. Make use of the **good sources of advice** all around you

The USyd Research Office staff and researchers in your school can give you advice on:

- What to apply for
- The right time to apply
- The right environment to apply from
- Potential collaborators, networking
- Building your track record

Top (18) Tips for Thinking About Funding Opportunities

18. You don't need to be the smartest person, you just need to **be strategic**

Intelligence helps, but the decisions you make and when you make them are crucial

Keep in mind that comparing yourself to others is easy to do – but often dangerous!

- Our assessment can lack objectivity
- We don't see what's below the surface with others/their work
- Everyone's work is different

Acknowledgements

Thanks to A/Prof Ben Thornber who provided a useful summary of internal and external USyd funding opportunities.