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WESTERN AUSTRALIA
Achieving International Excellence

Planning your Career for Grant Success

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Purpose of the session



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- Why apply for research grants?
- What matters?
- How?
- Nuts and Bolts
- Some questions for you

Why apply for research grants?



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Self evident?

- Has not always been the tradition in Mathematical Sciences

For me?

- To form and strengthen research collaborations
 - Some X-disciplinary work with statistics professor but no one in my area to work with
 - Facilitate research visitors
 - Later to build postdoctoral positions
 - Collaborative research really matters to me!

Why apply for grants?



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Self evident?

- Has not always been the tradition in Mathematical Sciences

For you? [I'm having to guess – you have to tell me...]

- Get a postdoctoral position for yourself?
- Work with a senior colleague on a grant for you as RA?
- Apply for visitor funding?
- Apply for postdoctoral position for someone else?
- Win prestige? Recognition? Promotion?



Why: Academic reasons [for me and you]

- Discipline of research planning
 - Explain where your research fits – why important
 - We do this for publications; grant writing makes us think it through thoroughly at planning stage
- Develop strategic approach to research
 - Where is your research going?
 - What are the next big questions?
- Research program rather than isolated projects
 - 3 Year grant is not usually single project



Why: Academic reasons [for me and you]

- But it is difficult
 - Where to start?
 - Probably with the research projects most occupying your thinking
 - Mentoring some of my postdocs – I understand how impossible this process sometimes feels
- Develop mentoring & collaborative relationships
 - With senior colleagues
 - With peers
- Communication skills
 - write to be understood [assessors, ARC panels, etc]



What matters?

Research environment

- Do you apply as sole investigator/fellow?
- Do you apply with an established team?
- The ARC schemes aim to:
 - “support researchers at different stages of their careers
 - build Australia’s research capability
 - expand and enhance research networks and collaborations
 - develop centres of research excellence”



What matters?

Research environment really does matter in reality

- More fun and stimulation working in a research group
- Benefits of mentoring
- Supports good progress
- Access to career opportunities such as PG supervision

Not always possible to be in a large research group

- Optimise your human resources
- Develop links with other groups
- Be part of a virtual research network

What matters?



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Research track record [for grant appns – or just for you]

- How to build it?
 - Publish your work – where? does it matter?
 - Use preprint servers [arXiv] to disseminate your work
 - Talk about your work? - where?
 - Conferences – how to meet senior researchers?
 - Try to get invited to relevant conferences
 - Develop your PG supervisory skills
 - Generous colleague will invite as co-supervisor
 - Builds confidence in planning research program for someone else, in collaboration with someone else
 - Teaching – how does that help?
 - Relevant courses, visibility to students



Grants - How?

Research track record

- How to describe it in the application?
 - Must stick to rules, but always an opportunity to describe your achievements
 - Find a way to give all relevant information
 - Try to quote someone else's evaluation of your work – more effective [e.g. read math reviews, surveys]
 - don't expect things to be “obvious”
 - Explain any constraints on your progress



Grants - How?

- **How to go about applying?**
 - Scariest thing is developing your math program
 - How to think years into the future?
- **Challenge**
 - Think of all the research questions you want to study
 - Where are these research questions heading?
 - What are the really basic questions?
 - Lift your application above the immediate problems you're thinking about – and find your project theme



How? - nuts and bolts

Iterative approach – it won't be right first up

Brainstorm with a friend!

Call in the favours and ask for critical readers

Trade draft applications with your colleagues

Ask if you can see someone else's successful application

Take advantage of training workshops etc



Grants and your career

- “A grant application is not a career”
- How to prepare yourself for next steps in your career?
- Gain experience
 - Teaching – offer to give a course, get advice
 - Independence in research – how?
 - Research supervision – how?
 - Job outside academia? – listen to other speakers
 - Within academia – is mobility important?



Some questions for you

- How can/do you optimise your research environment
 - Mentors, collaborators, time
- How do you develop your track record [grant/job applications]
 - Publications, conferences, supervision
- How do you optimise chance of grant success
 - And how does this fit in with your career plans?