

The wisdom!

Practical tips for ECR's...from Monash's research gurus

Here's the best advice in the universe, on the planet or possibly in Victoria, distilled like a fine wine from the words of the 2010/11 Monash Research Office Bulletin's profiled researchers...Monash's leading scientists, psychologists, botanists, biologists, linguists, doctors, metallurgists, social scientists and pharmaceutical scientists! Plonk these pearls onto your phone, into a folder, on the fridge, office door, laptop, desk....wherever they'll give you a lift, a new idea or a dose of encouragement!

How do I build a successful research career?

- Do research because you love it, rather than chase the dollars.
- Think ahead, plan well and be organised.
- Work in cross disciplinary groups to get different perspectives and approaches.
- Keep up to date with the highest standards of research methods.
- Stay open to opportunities in both fundamental and practical research.
- Find an area of research that is significant, nationally and globally, carve out an area of fundamental research, and then establish the applications and their funding potential.
- Understand that high quality research requires meticulous and sometimes tedious work.
- Consider doing your PhD and Post Doc in different countries and at different institutions.
- Try not to be defensive. Take feedback and criticism on board and absorb it.
- Put yourself out there; be prepared to be challenged!

What key skills do I need to develop?

- Creativity and tenacity; dedication and determination; patience, perseverance and being positive
- High level writing skills.
- Ability to read and summarize a wide range of literature in a short time, draw out key themes and turn research into readable papers.
- Great communication skills: the ability to communicate and engage with top people at the best companies...and with the media.
- Network building
 - Stay in contact with people you meet while studying.
 - Start with conferences and workshops. As follow-up, email key people with questions, talk over and exchange ideas with them, then drop by personally when you are next passing through.
 - Maintain and nurture your networks
- Teamwork! Be prepared to compromise and do your share of the writing for grant applications/ papers.
- Master information management.
- Acquire knowledge across disciplines - research is now multi-disciplinary.

How can I nail Grants, like LP and Discovery... and Prizes?

1. First, find a great research question!

"Get the right research question then spin it around so you can show a real world application."
Professor Mark Stevenson

- Be original. It's not all about solving the mystery, but about figuring out what the mystery is.
- Ideas need to be viable, innovative and of value.
- Ask what *don't* we know?
- Align research with national priorities and society's needs.
- Balance pure and applied science outcomes.
- Get wide feedback from different Schools, your Faculty's reader program.

2. Then write a compelling application

- Know what **you** are good at and explain it clearly.
- Pay attention to detail.
- Use photos, diagrams and illustrations to sell your story.
- Illustrate the benefits of your research.
- Use novel methodology.
- If you're unsuccessful – revise, adapt and amend, but don't give up!

What about prize applications?

- Pitch your ideas and explain your research in a context that reviewers can understand.
- Know what judges are looking for and attract their attention quickly.
- Metrics can help reviewers make a case to choose you over someone else.
- Get support from your Head of School, and ideally, the DVC Research. Know them well so they can recommend you.

How do I grow great partnerships and collaborations?

"For collaborations to really work, you need to enjoy the company of the people you collaborate with and like hanging out with them." Professor Scott O'Neill

- Know where you want to go.
- Collaboration is about win-win and alignment on the project.
- Think big! What is best practice in this field? Who is the world's best? Find out how you can engage and work with them.
- Find industry champions who are passionate about your research... and are in a high enough position to influence.
- Work with people with similar interests who share the same ideology and vision.
- Find people who can translate research outcomes into real world policy and function.
- Start building the right mix of partners early – it might take months or years!
- Build links through mentors and supervisors with shared interests.
- Hold round table discussions early with a range of potential industry and government collaborators to gauge interest, focus ideas, get them excited.... and build ownership.
- Sell benefits! Know what partners want out of the research and what's important to them. Familiarise yourself with their strategic plans.
- Always collaborate as equals and respect each other's different approaches to research.
- Build interdisciplinary collaborations to broaden your possibilities.
- You may need to leave Australia and work in another country.
- Be prepared to go out of your comfort zone.

Oiling the collaboration machine

- Keep up regular contact with partners by email, phone, teleconferences and face to face visits so they are fully informed and engaged.
- Be inclusive and accommodating so everyone has their say.
- Always behave professionally but get to know your partners at a personal level.
- Communicate your results widely to organisations that make decisions on your research outcomes.

Persevere with the ups and downs along the way... and don't make hasty decisions.

And the best advice of all? Go to all the relevant workshops run by the Monash Research Office (<http://www.monash.edu.au/researchoffice/cal.php>)...and check their tip sheets!