

Developing an academic career

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Outline

- Who we are
- To be an academic or not to be an academic...
- Teaching & Supervising
- Research
- Service
- Leadership
- Stay or go?
- Other priorities...
- Q & A



About me

- Academic for 21 years – 17 in NZ, 4 in Australia
- BSc(Hons), MSc, PhD all from Uni Auckland
- 12 years (so far!) as Head, Deputy Head, Dean, Deputy Dean, Director, ...
- Teaching – Software Engineering team projects, software design, project management, HCI, programming, databases
- Research – 260+ refereed publications, over \$14m NZD in external research grants, over 50 PhD and Masters by research students



Greetings / Academic or no?

- Go around room:
 - Who are you, where from?
 - Why are you an academic / want to be an academic?
 - What other options did / do you have?
 - What do you want to achieve in your career?

- Being an academic isn't the only thing you can usefully do with your life / your PhD / etc!!!
- If you hate it / its too pressured etc – get out!!
- There are LOTS of other options... esp for CS/SE academics



Academic Careers 101

- Hard to get a post-doc
- Hard (very!) to get a permanent (or even fixed-term) T&R position
- Rewarding in many ways
 - What do you find rewarding?
- Challenging in many ways
 - What do you find challenging?
- IMO – really need to PLAN to be as successful as you can be...



Planning

- 3-5 years
- Teaching: areas want to teach, specific units, teaching research/ scholarship want to do, new things want to try (“innovations”)
- Research: projects want to work on, resources you need to do it, students to recruit, grants to apply for, papers to publish, networks to build
- Service: YES – its important!! - areas you want to “make a difference”, ways you want to contribute, service to university vs discipline vs community vs to others...
[which one am I doing while standing here?? 😊]
- Talk about with your Dept Chair, Supervisor – they will like someone this organised!! It might need a bit of give and take...



Teaching & Supervising

- I find this the most satisfying part of my job
- EVERYONE (typically) needs to teach
- It MUST be done well (or at least satisfactory++)
- Its not rocket science
- So saying – our students are getting more diverse, challenging, have mental health challenges, are doing part-time work, are taught on-line, ...
- It's the part of your job you will 99% certain **MAKE THE MOST DIFFERENCE IN THE WORLD**



PhD / Masters Students

- Recruit good ones
- Look after them
- They are future “colleagues” – treat them as such
- Don’t treat them as “paper generators”
- Build up a research group (by yourself or with other PhDs / colleagues)
- Some students do really well ; most be moderately well ; some struggle – its really hard to tell which will be which!
- You would be amazed (or not) how many academics do/don’t do things above 😞



Students (cont)

- Supervise & work with students as a team – “joint supervision” concept
- Be organized – you & student (Work plans! Agendas!! Minutes!!!)
- Manage reading/writing carefully
- Manage email carefully
- Its not your PhD...



Tips

- Treat students well – they are the next generation of IT professionals – and academics!
- Be consistent – marking, feedback, treatment of students
- Be organised – students are really annoyed by disorganised lecturers
- DON'T change assessment during semester
- Answer questions promptly, be available (email or office or forum)
- Give sufficiently detailed feedback
- Get expert help for students with challenges
- You would be amazed how many academics don't (or do) many of the above... (or – maybe you wouldn't)



Research

- Its usually part of your job to do this – whether “technical” research or computing education research (or both)
- Do what you enjoy / have passion for vs what will bring the grants/ students/papers – yes, I really said that 😊
- But – its an area where the bean counters can... easily count! So they do
- Typical “KPIs”
 - RHD students / completions / placements
 - Papers in high repute venues
 - External grant income
 - Collaborations / relationships incl industry
 - And increasingly – “impact”



Publishing

- Quality, quality, quality
- I am not a fan of venue rankings / impact factor etc. I do think there is (some) merit in citations
- Avoid “junk” venues / “write-only” venues...
- Target conferences to network and have impact
- Target conferences / journals to have impact
- Journal or Conference? What ratio??
- Perseverance – not just publications but also grants – is really a massively undersold virtue...
 - About 25-30% of my papers rejected
 - About 30% of my grants rejected



Grants

- Its part of your job to get external resourcing... especially these days of tight budgets
- Identify your strengths, target realistic things, get help – lots of it!
- Matthew effect – be co-CI with experienced person
- Planning really helps – what do you need to do to become competitive (may take years to build up to)
- All money spends just as good – lots in industry to be had if you learn the ways to get it/build relationships
- If at first you don't succeed...



Collaboration & Networking

- Good relationships will really help you:
 - References for jobs / refereeing for grants, papers
 - Collaboration on papers, grants
 - Co-supervision
 - Help make your work better known
- Really need to develop these from PhD days
- Multi-disciplinary research – two schools of thought...
- Watch out for exploiters! (sadly)
- Today / this week is a great time to start :-D
- Write a blog if you feel like it, join ResearchGate, linkedin etc
 - “Altmetrics” – fad or future??



Tips

- Prioritize – what is most important? Enjoyable? Long-term impact??
- Focus on quality
- Mix of journals and conferences is good
- Develop a thick skin (referees can be v. brutal!!)
- Develop perseverance – you'll need it!
- Recruit, develop, work with, look after RHD students
- Develop mutually beneficial collaborative relationships



Service

- No one becomes an academic to do service (well – almost no one!)
- BUT – it's a really important part of academic life
- Lots of kinds:
 - Service to uni – committees, course co-ordinator, associate Dean, HoD, Dean etc
 - Service to discipline – refereeing, organising conferences, Associate Editor/Editor etc
 - Service to community incl industry – consulting, short courses, schools, NGOs, professional societies, etc
- Its important and it can be very satisfying – yes, I said that too!



Leadership

- Big “L” and little “I”...
- Personally – I have found this to be a very satisfying part of my academic service (I suppose why I keep doing!)
 - The HR meetings even aren’t always THAT bad – although...
- Have a chance to make a much larger difference
- Have a chance to mold others careers / directions (for the better)
- Are “in the loop” for changes etc
- Like all service – MUST DO IT TO BEST ABILITY
- If I do a bad job as Dean / HoD – EVERYONE suffers!!!



Tips

- Service is not why we became academics – but it IS important part of being an academic
- Increasingly difficult to get promoted without a good service portfolio
- Not just refereeing – organizing, uni service, service to wider community
- There should be (serious) consequences to those who don't do or don't do it / do it well (and increasingly there is)
- Its actually (mostly) enjoyable work – yes, its true!!



Moving jobs (within or out of or into academia...)

- Sometimes you are a round peg in square hole
- Sometimes “better” opportunities arise
- Sometimes family or other considerations outweigh professional considerations (e.g. my UofA -> SUT...)
- Moving institution is HARD, no matter what support given
 - And moving countries even harder!
- Moving to industry / from industry much harder again
- Sometimes its best to stay put
- Sometimes its best to go



Tips

- Don't burn bridges!!! No matter how upset, under-appreciated, etc you might feel...
 - The grapevine has a way of making it all known too
- Look VERY carefully before you leap
- ASK for things you want / need – don't be shy!!
- Get EVERYTHING you want / are promised in writing (not email – written, signed contract)
- Grass is most certainly not always greener
- It can be really hard (if not impossible) to go back
 - Especially if leave academia



Lastly... Work to live, not live to work

- There is MUCH more to life than work...
 - E.g. I have wife, 5 children
 - They are WAY more important than – what I am doing now 😊
- It's a tragedy when work comes to dominate your time/life
- Maintain outside work/professional area interests
- Maintain outside contacts, friends, activities
- Strive for BALANCE in life – work is one component

Please – get help if you find you need it (stress, financial, relationship, conflict, ...)

Questions? Discussion...

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