ECR Workshop Notes – Getting a Faculty Job

Compiled by Cormac Purcell, Shane O'Sullivan, Stas Shabala & Matt Owers.

Introduction

This document summarises notes taken during the Early Career Researcher workshop in Shoal Bay on Friday June 1st 2012. Two one-hour sessions from 9am to 11am dealt with securing a faculty job.

- 1. Up to the interview (Bryan Gaensler).
- 2. Interview and offer (Sarah Madison).

Getting a Faculty Job 1: Up to the Interview

The three key points

- 1. Clear concise CV layout and do not pad CV or publication list.
- 2. Do write a cover letter and use it to address the selection criteria.
- 3. Keep your web-page up to date (no anti-networking photos etc.).

Which job should you apply for?

- Make a **strategic decision** about the make-up of the jobs you apply for, e.g., observatory position, pure research, teaching & research or teaching only. Decide what sort of work you would be happy doing
 - It is rare to find a research-only job, so you need to think about what you are happy to do the other 50% of the time. Need to have thought through a career plan otherwise it is obvious to hirers that you just want a job, rather than a career.
 - Often need to think of a way that you can make yourself fit into a job.
- Will you be happy with the location of the institute (country and city)? If possible visit and give a talk. This is also a good way to bump your name up the list of candidates.
- Investigate potential employers at conferences approach senior people and don't be afraid to be upfront that you are looking for work.
- It is very important to make contact with someone at the institution. Always write and ask for more information! You can almost rule yourself out if you don't contact them.

Potential careers outside astronomy (Rachel Webster)

- Astronomers are very desirable in a large range of non-astro jobs: biological, medical, geoscience/environmental/climate, finance/banking, etc. etc.
- **Transferrable skills:** analysis of huge datasets; advanced computing; solving hard (real-world) problems; modeling; writing/presentation.
- **Potential employers:** universities, research institutes (CSIRO, DSTO, BOM, IBM, medical institutes), financial institutions, hospitals, management consultancies, secondary

teaching/science education. Management consultancies consultancies often employ experts on short-term contracts.

Preparing your application

General Advice

- Check out the online forms etc. in good time online forms can be clunky and differ from place to place.
- Human Resources often put a lot of rubbish into applications: don't leave anything unanswered. If in doubt ask the contact person.
- Deadlines are almost always rigid. Don't forget to factor in the time-difference, if applicable.
- **Know your target**: Find out about the employer (dept, school, entire institute). Make sure you have explored their website and understand their interests, connections to other departments and internal structure.
- Always tailor your application (research and teaching statements, CV) to the job. If applying for an ARC grant make sure your statements align with the aims of grant. Get the science case and paraphrase.
- Keep your CV (or an associated file) up to date as you go along add in talks, papers etc.

References

- Give referees time so they can think about what to write. Make sure they have a copy of the job description so they can tailor the text to address the selection criteria.
- Choose your references carefully (not your buddies). Your referees knowledge of you should reflect your experience. For example, if some of your case is made for teaching make sure that one of your referees knows about and can comment on this.
- Referees have reputations for writing meaningful (or not) references. Ask around for who has a good reputation. People from the US only write positive letters difficult to tell apart. People in Europe write a more balanced assessment.
- If first postdoc, your PhD supervisor should be one of the referees (unless there is a very good reason for not doing this, in which case ask your main referee to explain why.)
- **Tip:** Create a Google Docs spreadsheet with a table of jobs you are applying for, and links to job description, your application, deadlines etc. Send this to your referees early.
- Some online application systems automatically send emails to referees asking for letters. However, most only send at the time you hit the submit button! Make sure you submit leaving enough time for the referees to write a good letter.
- As the deadline for each job approaches email your referees a gentle reminder with a link to the job advertisement and your Google spreadsheet, including your completed application and CV.
- Always thank your referees and tell them the outcome.

Addressing the Selection Criteria

- A good cover letter is *critical*. This is the only chance to say in your own words what attracts you about the job and allows you to add extra information (e.g., you were once a school teacher). Don't add anything personal (moving for love etc.).
- SPELL CHECK!
- Always address the selection criteria specifically (point by point) even if you are repeating material from other forms, or your CV. Give a paragraph response for each question.
- If you don't have a certain skill set, you need to answer but put positive spin on it (try to include some institution-specific information). For example, if you have no teaching experience say "*I want to learn technique X developed at your institute*".

• The cover letter can also include key things like H-index, citations; things from your CV that need to be highlighted.

Publication List

- **Don't** pad your CV or publication list. Do not include sections for "papers in preparation", conference attendance lists or abstracts. Only put papers submitted if actually submitted (include date submitted). Even archive listing is poor must have a journal reference.
- List papers in reverse chronological order, numbered, and quote the number of citations and source (ADS, Google scholar etc.).
- Give title of paper, full journal name (don't abbreviate), and start/end pages.
- Conference papers are fine early in your career, but omit them later to be more concise. Do split up refereed and non-refereed papers.
- When listing authors of papers put your name in bold. It is also a good idea to briefly describe your contribution to co-authored papers.
- People on big collaborations can list "+ 23 other papers in which I played a minor role".
- Put an asterix and footnote next to students you have supervised.
- Invited talks will stand out and make you more competitive. However, for others you should summarise where you can, e.g., *"I've given 11 talks at 9 institutions around the world"*.

CV

- Stating your nationality does no harm, however do not list birthday, marital status etc. This is taboo in the USA and not advisable to put on any applications. Likewise don't include a photograph.
- It is very important to put a statement of research interests up front a single paragraph. This forms a snapshot of where you are, what you do and where you want to go in research.
- Tailor your application to the institute to which you are applying. For example, if applying for an ARC-funded position, find out what the proposal was about. It is perfectly acceptable to ask for a copy of the proposal prior to applying.
- Show you are a responsible citizen list duties and services (organising seminars, committees etc.)
- Explain unusual things, like prizes why did you get it?
- It is good idea to put successful grants in and the amount awarded even travel grants as a PhD student. This is especially impressive if you get money to invite someone else to visit. For example, Nick Seymore is running a conference on a grant. Make your conference!
- Keep your web-page up to date and your Facebook page clean. If you are short-listed most panels will look at these.
- If you are fluent in multiple languages do list them and the level. If you are not a native English speaker do list English and your proficiency level.
- **Do not** list jobs you were offered and turned down this comes across as arrogant.

LIKE -no future Clear we examples -no rese XC presenta 200 INVI "service 01 NO explaining PAZE PRSTS bold name in author list stortully * papers by students mak e S (Jullets (total & per paper Cr highlights coleer Gron 2 details highlights on WWW page nguages

Above: The participants *likes* (left column) and *dislikes* (right column) for CVs randomly distributed to the audience.

Government and Science Policy

Speaker: Brian Boyle

Summary from: Amanda Bauer, Leith Godfrey, Thibault Garel

The main points from this session are:

- Read the Australian decadal plan and mid-term reviews in order to be familiar with the goals of the community.
- In order to get involved with science policy, follow the procedures of your organisation and join committees (e.g. Science Meets Parliament, National Committee of Astronomy, Science and Technology Australia, etc...)!
- In working with government, you must think carefully in response to questions. Provide advice, but stay away from policy commentary (unless you have a Nobel Prize). You can be visionary, but you must also be realistic. It is OK to say 'I dont know' and ask for clarification.

Summary:

The discipline of astronomy enjoys a good relationship with, and is highly regarded by the Government, largely due to the fact that the astronomy community acts with unity, and there are not sections of the community "complaining." Astronomy is well known for the ability to have a clear view and be well organised. Future interaction with the Government should seek to maintain, or enhance, this impression, and the good relationship that has been built up over more than 20 years. That means learning to "sing from the hymn sheet" in order to maintain unity, and develop well prepared business plans, as this minimises the risk for Government. One should understand the vision and science goals of the astronomical community in several years time, in order to communicate the policy and financial needs to achieve those goals. To do this, one should be familiar with the Decadal plan and mid-term reviews prepared by a committee of astronomers with feedback from the entire community.

Governance. Australian astronomical organizations depend on the Department of Industry, Innovation, Science, Research and Tertiary Education, which is comprised of four Ministers, among which the Minister for Tertiary Education, Skills, Science and Research. This Minister is subdivided in specific departments (e.g. Research Infrastructure, Research Agencies, etc) which are in charge of the main scientific Australian organizations, like CSIRO (Commonwealth Scientific and Industrial Research Organisation), AAO (Australian Astronomical Observatory), ARC (Australian Research Council), for instance.

The budget process runs from July through May. This is the means to get new funding initiatives for astronomy, but proposals can be kicked out at any stage. Examples of funding initiatives are joining ESO, bid for SKA host, Australia-China joint research centre, Gemini membership, ASKAP, the Super Science Initiative, etc. How does one get involved in science policy? Follow the policy of your organization to get involved in government policy. Early career researchers are also eligible to be part of committees, and they are therefore encouraged to contact people in charge. Examples of potential committees are the AAL (Astronomy Australia Limited - RTAC, OTAC, AERAC), TACs, NCA (National Committee of Astronomy), ASA (ANITA, EPOC, WIA), Science and Technology Australia, Science Meets Parliament, Academy of Science. Astronomy is seen as very well organized in eyes of government and the other sciences and we should aim to keep this up!

In working with members of government, behave with trust and respect towards public servants. Remain proud of what you do as an astronomer and humble that people want to support it! Represent the decadal plan and midterm reviews in order to present a united front to the government (which Australian astronomers have established well!). On policy, one should provide advice, but not commentary (unless you have Nobel prize;) "you should have done this" (commentary, in public) versus "you could do this" (advice). Never go beyond your brief, provide advice that has been asked for, but not more. Provide the vision, show how to implement and know risk level.

Select Quotes:

"It's amazing what can be achieved when you don't care who gets credit."

"The most convincing argument is one that comprises equal measures of logos, ethos, pathos" - Socrates

"Vision without implementation is hallucination." In other words, its great to have a vision, but you need to be able to back it up with a robust business plan.

"Diplomacy is the art of letting other people have your way"

"You didnt realize my former career was a porn star" - Brian Boyle

"Grit your teeth and remain pleasant."

"know where the puck is going to be" – i.e, think forward

"Q- What's the chance of detection of SETI?"

"A- Chance's low, but potential impact is infinitely high..."

"Capability = skills, infrastructure and relationships."

"There are rules, but they can be changed."

ACRONYMS

RTAC	Radio Telescopes Advisory Committee
OTAC	Optical Telescopes Advisory Committee
AERAC	Astronomy eResearch Advisory Committee
TACs	Time Assignment Committees
ANITA	Australian National Institute for Theoretical Astrophysics
EPOC	Education and Public Outreach Committee
WIA	Women in Astronomy
NCA	National Committee of Astronomy

 Table 1: Non-exhaustive summary of committees in Australian Astronomy.

Getting a Faculty Job 2: Interview and Offer

The three key points

- 1. Be presentable.
- 2. Prepare for the obvious questions simple to look them up on the web.
- 3. Have questions for the panel.

Sarah and Bryan Brain Dump:

- Tailor your interview to your panel. Make sure you ask who is on the panel (by return email) and their backgrounds. Are there any members with non-astronomy backgrounds?
- Make sure you practice for the standard questions, this can be with your partner, your colleagues or anybody willing to listen. Look the questions up on Google and prepare answers.
- Be presentable for your interview a suit is good. This is good advice even if video conferencing.
- Worth paying for proper video-conferencing rather than Skype. Think about your backsetting, is it professional looking? Don't use your laundry room!
- Project your voice well and practice your intonation.
- Be conscious that 'likes hire likes', i.e., personalities tend to hire people with the same personality types play to your strengths here.
- If you find yourself speaking garbage, stop, regroup, start again.
- At the end ask insightful questions of the panel.
- If you are giving a talk find out who the audience is and pitch the talk at them (i.e., to a suitable level).

Mock Interview:

Sarah being interview for a faculty job by the panel:

Bryan: What about this university attracted you?

Sarah: The teaching techniques which you are expert in, for example ...

Kate: Name an achievement you are proud of.

Sarah: An award for a team-work.

Geraint: How would you deal with conflict in the workplace.

Sarah: I'd like to answer with an example: I've been in a team where we need to allocate tutors in a workplace where changes take place at a fast rate. We needed contingency plans for absences, however this lead to conflict between the preference and tutors. I had not been in this situation before

however this lead to conflict between the professor and tutors. I had not been in this situation before so I consulted my line-manager and implemented his solution.

Bryan: Where do you see yourself in ten years.

Sarah: In your job!

Bryan: What aspect of this job would challenge you the most?

Sarah: Managing a team and the challenges involved.

Kate: What would you say is your biggest weakness?

Sarah: I agree to do too many tasks – spread myself too thin. I was hoping I could get some mentoring on this issue.

Geraint: What are the key skills you bring – why do you stand out?

Sarah: I do scholarly research in teaching practices and implement the research in the department. I would like to think I could broaden your education horizons by bringing some of my network with

me.

Bryan: Are you planning starting a family – this might conflict with duties.
Sarah: Ha!
Kate: When could you start?
Sarah: I have some teaching commitments, so September.
Geraint: Anything you would like to highlight?
Sarah: I have lots of experience in outreach and would like to bring this here.
Bryan: Any questions for us?
Sarah: I see you have a bla-bla thingo scheme and I would be keen to participate. I was also wondering what opportunities there are to get PhD students?

Discussion on Mock Interview

Bryan: Note that the 'family planning' question was totally inappropriate. Deflect inappropriate questions by simply saying that you do not want to discuss this at the time.

Audience question: If the question is asked 'how much money you expect?', what should you do? **Bryan**: Tell them what salary you are on and say you would not expect to drop down.

Panel: About the conflict question: always have an answer, even if you have not personally experienced conflict. Never name names in this case – be discrete. Don't say that the 'my boss is a groper'. It is the skill-set and approach you took which is important. If you don't have experience give a hypothetical example. Note that interviews are confidential. Feedback is normally not given. **Panel:** Be prepared for questions like: What do you know about the University. Go to the university website!

Quote of the session, by Rachel Webster: "CSIRO is a many-armed octopus".