SIfA EMCR Workshop 2015 – Session 2, Panel 3
by Jane Kaczmarek & Jason Drury

Panel 3: Kim Apted, James Alexander, Scott Wales, Sonia Cianci, Matthew Francis
Moderator: Eromanga Adermann

Kim Apted: Passionate about mentoring while people are young.

James Alexander: Competitive, selective program for start ups. Organises program for start-ups, very interactive.

Scott Wales: Centre of excellence for climate science. Exited his PhD without finishing it. Provides support to people running models on the supercomputers.

Sonia Cianci: After finishing PhD, realised she's not suited to academia. While deciding what to do, she joined a admin compnay and has worked her way up. The public service has so many aspects. If you decide you want to leave academia, there are a lot of research facets in the public service.

Matthew Francis: Space weather services section of the Bureau of Meteorology. Diverse role -- installing sensors in the Outback, designing the web interface, building models, communicating with stakeholders, etc. Got a new job starting as a data scientist (hasn't started yet).

Q: "I think we would all like to know about your transition from your degree/field to your current position? What skills were useful and what steps did you take?"

Scott: When he left, he was pretty depressed and decided he wanted out. He found a job he wanted and decided to apply! A lot transfers over from astro to meteorology -- you see a lot of astro people in meteorology. Experience in supercomputers/HPC. You pick up specific skills in climate science from workshops/colloquia/etc.

Matthew: I knew I wanted to transfer out of the roll I was in. Tried to get a sense for what it would be like in each industry before I made the jump. What skills do I need to fine tune? Kaggle.com runs machine learning competitions and is a great way to get a feel for the position. I learned what I needed to learn. I was interested in science outreach, so the position that I've just moved in to was a consulting role. It took me 2-3 years [in my current role to prepare myself] for the new position. I may have been able to ready myself in a month, but I was conservative.

Sonia: It was a revelation that I could get a 9-5 job and not feel guilty when at home and not reading something. The people that I work with are all great people -- that is one of the things that have kept me there. **Anyone** here can do admin -- the things that we do that we don't think of as skills are magical in the real world. Being able to analyse, you can do research, you can learn quickly. Being able to provide information clearly.

James: I wanted to start an accelerator program ... so I did. There were a lot of people leaving uni with great ideas that weren't being fostered at USyd. So why were they being encouraged to work for someone else rather than start something new? I encourage you to think about what skills you have and see if there is any opportunity to be used in a day to day. Everyone is learning when

you're doing a start up, so you will learn everything. There really isn't a work-life balance in the **phase** of startup.

Kim: My honours year was a great opportunity to apply the abstract ideas that I had been learning in my coursework. The best way to learn is to do. I would read job ads and think I wasn't good enough to do those jobs. For the Optiver job, I didn't apply originally. When presenting her honours research she was contacted by someone in HR. What I didn't realise was that as a member of the honours group, I was already one of the best at what I was doing. Same goes for any PhDs. The ability to learn on the job is what some company's are looking for. Many places will teach you what they want you to learn -- it takes time.

Q: "Given that only 10% of graduating astro students will end up with a permanent astro job, is it better for me to leave now and get N years experience in data science, or to get the higher level analytical degree? How does your employer value the junior experience or greater thinking skills?"

Matthew: From my perspective, I don't regret doing my PhD, regardless of the resultant positions. If someone is going into their PhD just as a systematic next step, it's probably not a good idea.

Kim: It is a really personal question that I don't think you can say you'll be more or less employable with or without the experience. It's comparing apples to oranges... and we like apples *and* oranges. It comes down to the passion. Potential is important.

James: Ultimately, there is no way that student would think 'there's only a 10% chance I'll get the job.' Don't plan your career, look for opportunity. You can't plan your career since you don't know the future. In tech companies, we really value the analytical side. If a company is not willing to teach you what you don't know, they aren't worth the time.

Scott: In the research support area, not having a PhD has never held me back directly. People value the skills that you learned during your PhD (programming/parallelising in this case). Research background is important, the level not so much. We look for researchers because we work with researchers, so we can then understand what they want to get out of it.

Sonia: It depends so much on the person. You can start one path and change.

Q: "Do you have to be Australian to work in the public service?"

Matthew: It varies. At a base level, you don't need to be a citizen. Some jobs may require that you have the ability to get security clearance.

Q: "How would you deal with salary negotiations? Recruiter vs. HR?"

Matthew: Public service there is no negotiation.

James: If it's the first job you're going in to then the salary is usually pretty well defined for graduate roles. I hate recruiters, generally speaking. Remember that the recruiter is taking a

decent cut. I would guess that you're negotiating the starting position level, rather than the salary.

Scott: Avoid recruiters. They are unhelpful and an impediment at times. They often just want to get hits on the board rather than actually be able to place you where you want to be.

James: Industry mentors? Reach out to someone in that space so that you can get independent, unbiased advice.