### SIfA EMCR Workshop 2015 – Session 3, Panel 3

by Chris Herron and Heath Jones

**Panel 3:** James Alexander, Kimberley Apted, Sonia Cianci, Matthew Francis, Scott Wales **Moderator:** Luke Barnes

**Kim:** Software developer at Optiver, degree in Computer Science. Was approached by Optiver at a Sydney University event, and has worked for them since.

James: Founder of Incubate, a startup accelerator program.

**Scott:** Works at the Centre of Excellence for Climate Research, in modelling systems, supporting academics. Works with partner organisations. Left his PhD to go into this role.

**Sonia:** PhD in astronomy at Sydney University, then left academia and joined an admin agency, now works permanently at the cabinet office, as a public servant and executive assistant to the General Counsel.

**Matt:** Has a PhD in cosmology, did a post-doc overseas, now works at the Bureau of Meteorology, predicting solar weather. Tasks performed include installing equipment, then making pipelines to analyse data, then coming up with predictive models for the data. Soon working for a data science startup.

## Q: "If you made a transition, how much preparation or upskilling did you do?"

**Sonia** - None, already good at administration from working in astronomy. They provide plenty of training in public service. Started in general admin and gained skills to become an executive admin. All of us are capable of doing admin work.

**Scott** - Works on models similar to what are used in Physics, but the complexity of the models is greater because they can interact with what they study. Pick skills up over time. Other skills carried over from academia.

**Matt** - Prepared for a career in data science for 2-3 years, by free online courses. Probably not necessary, but helps get you into a good position. Felt the need to deliberately find new skills. Found online courses useful, from Stanford, Caltech, etc.

**Kim** - If you are new to a field, there is usually a training period, e.g. in trading/finance. You learn on the job, specifically for trading and trading research. 'Rookies' have six months training. They look for basic programming and data analysis skills.

#### Q to James: "What kinds of startups does Incubate support?"

**James:** A broad range, normally it is a scalable service that can grow to a large size, for example an atomic resolution microscope that can discern each atom in a material sample. Also a device to

help cancer patients breathe better. Mobile and software as well. Normally a mix of hardware and software initiatives. Consumer based ones are big, e.g. sunglasses with a bluetooth chip in them that can message your phone, so you don't leave the glasses behind. Developed new things to make this idea possible, such as smaller bluetooth chips and batteries. Learn things by doing, and from mentors. You only need a prototype when coming to Incubate. Incubate can also help you find a team to work on a project.

#### Q: "How did you find your jobs?"

**Scott** – Seek (http://www.seek.com.au), put in a submission on the last day the job advert was available.

Matt - Found on Seek, for data science job.

**Sonia** - Joined a few admin temp agencies, and got a placement. Public service spots are normally advertised. High level positions may go through recruiters.

**James** - Started Incubate to help students and is now the operating model for other start-up accelerators.

**Kim** - Found the job on Seek, but didn't apply. Was later approached by Optiver HR at a Sydney University function. Also looked at IBM at a Careers fair. Need to be careful of company culture, check the remuneration you will get, the training program you will go through, to see if it is suitable for you.

#### Q: "Is it a good idea to use a recruiting agent?"

**Matt** - Your objectives aren't aligned. The recruiter wants to make a sale, but you want to find the right job for you.

**Kim** - From the perspective of an employer, recruiters are hard to deal with, since they are expensive. Often better to talk to someone directly, and get to know them better.

#### Q: "Do you advertise directly, or use recruiters?"

Kim - Both, since growing so quickly.

# Q: "How important is the amount of time you spend working on post-docs before switching out of academia?"

**Sonia** - This wasn't an issue for her, as she joined the admin agency while figuring things out. It doesn't matter much in public service; you can join straight out of a PhD, or if in a post-doc.

**Kim** - The average age of hires has been higher recently. Diversity has been increasing as well. People switching is not that common, though. It doesn't matter if you mature via academia or through industry work. It is important to evaluate where your skills are, and if this matches up with the amount of time you have spent working. Your experience should be reflected in your skills.

**Scott** - Switching is fine, as skills carry over, and age is not too important.

Matt - Various ages are hired by the Bureau of Meteorology.

## Final remarks - "One skill very useful to your work that you obtained outside academia"

**James** - "Pitching" ideas, i.e. being confident, being able to sell things. It is important to be able to communicate the impact of something to people who might not be familiar with what you are talking about.