MY DREAM JOB

Bioanalytical chemist

Alistair Grevis-James' childhood interests in breeding fish, chickens and water plants played a natural role in his choice of a science career. He has worked in a wide range of capacities that combine his love for chemistry and biology. He's worked in a communications/outreach presenter role at a non-profit, in veterinary pharmaceutics testing, and his current role is a bioanalytical chemist at CSL (Commonwealth Serum Laboratories), a global company which develops biotherapies for people with life-threatening medical conditions. Here he tells ***Student Guide*** what he loves about his work.

What was it that drew you to a career in science and chemistry in particular?
Growing up I had some quite unconventional hobbies, including propagating water plants, breeding ornamental bantams (miniature chooks) and tropical fish keeping. This exposure to the natural world is what sparked my interest in science. I have always asked lots of questions (about everything!) and via the genetics of chickens and the chemistry of aquarium water, my passion for science was born.

What kind of study or training did you complete for the role?
My career so far has been quite typical of someone in gen Y, in the sense that I had a succession of roles over a short period of time. After finishing up at the University of Melbourne in 2012 I moved over to Perth, where I worked as a science communicator with a non-for-profit called Scitech. I delivered science shows, workshops and activities for school students and the general public. During my undergraduate degree I had participated in the In2Science Peer Mentorship program as a volunteer, and this gave me the experience I needed to work at Scitech. I relocated to Sydney in early 2014, where I worked as an analytical chemist for a period of two years. I worked in the food/agricultural technology space, specialising in the quantification of macronutrients for use on nutritional panels and veterinary pharmaceuticals testing (instrument-based). It was my experience in this role which allowed me to successfully apply for my current role at CSL.

What does a typical day at work involve?
We develop life-saving biopharmaceutical products for people suffering debilitating illness. The process of drug discovery – taking an idea from benchtop to bedside product – can take anywhere from five to 15 years. Each of these products exists as a project before it is launched. So at any time we have numerous projects that are at various stages of development, and for me this means there are numerous samples to be tested. I am trained in a variety of analytical biochemistry assays (experiments), and a typical day for me involves testing samples using highly specialised scientific instrumentation. If a project is in an earlier stage of development, we might expect more samples with a higher variability of results, whereas a more advanced project will have less samples with extremely consistent results.

What do you love most about your job?
There are a few things I love about my job – I'm quite lucky! One of them is working with experts. I am in a role where I am surrounded by people at the top of their various scientific fields. I find this extremely inspiring. If I ever have questions about the science I can find someone who will give me a brilliant answer. The CSL core values are customer focus, innovation, integrity, collaboration and superior performance. These five things fit extremely well with who I am as a person. I know when I am at work both my colleagues and I strive to embody these values. I also take a lot of pride in what I do and this is another reason I love working with CSL.

What's the most challenging part?
Probably juggling my time between the various projects/tasks. There is always heaps going on. For example, we often have guest speakers come in and discuss the latest breakthroughs in biochemistry, or we will have a new scientific instrument that needs calibrating. These things can make it hard to get back to your desk and complete paperwork!

Do you have advice for students looking to pursue a career in science?
As I mentioned earlier, I always thought I would end up in biology, but through exposure to practical work I ended up in chemistry and then biochemistry. So I would definitely say expose yourself to as many different areas of science as you can. This can be through reading, attending public lectures, practical-based school holiday workshops, working with a tutor, emailing someone at a university, watching videos on TED and YouTube and the myriad of open access courses available online. CSL sponsors the National Youth Science Forum, a program that exposes senior secondary school students to careers and courses in science.