

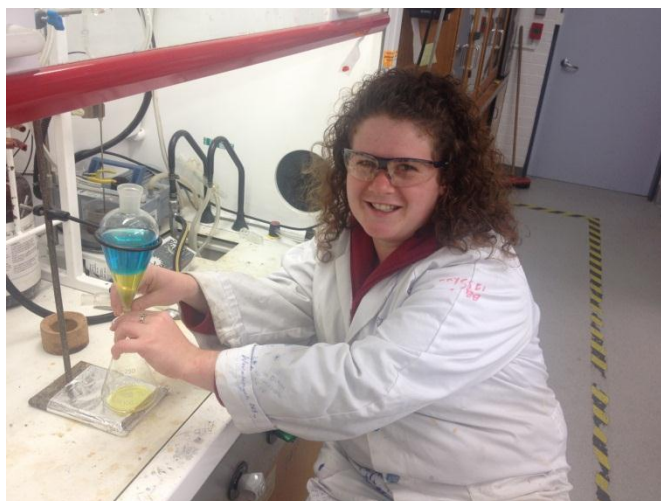


national science week 2014

Krystal Woolley

Organic/ Medicinal Chemist

When I was a young child I was never an artist or a dancer, they just weren't my style. Science on the other hand always intrigued me and I was always eager to ask my favourite question, "Why?" Why do leaves change colour? Why do plants grow better in some environments but not others? Why was fizzy cordial fizzy? I always wanted to find the answers or to understand these questions. Science was my strong point and through high school I had the most influential chemistry teacher – he was crazy and fun in an inspiring way – and this is where my love for chemistry started to develop.



After high school I went to college to undertake as many science subjects as possible.

University for me was always part of my plan and after finishing year 12, I went on to complete a Bachelor of Science at the University of Tasmania, where I studied a broad range of topics including Antarctic science, plant science, zoology and chemistry. After graduation I went on to enrol in an Honours degree in organic/medicinal chemistry before continuing the same research as a PhD student.

To put my PhD project into context I'll ask you a few things. When you go to a doctor with an illness or get diagnosed with a disease, you receive a medication to prevent or help with the symptoms. Do you ask where did this drug come from? How was it developed? What are the side effects? Well that's exactly what I do! I use synthetic organic chemistry to synthesise potential therapeutics to treat mitochondrial diseases, which has the possibility to impact on the wider research community as a whole.

In the future I plan to stay within the field of medicinal/synthetic chemistry as the opportunities in research, travel and future jobs are mind blowing! I'm currently a first year PhD student and have a lot to learn and discover as a medicinal chemist.

For more information: www.utas.edu.au/chemistry

www.YoungTassieScientists.com