



national science week 2011

Morgan Downes, Menzies Research Institute *Delving into DNA*

At school, science was always a favourite subject of mine. After finishing school, I knew that I wanted to go to uni but I didn't have a clue what I wanted to study. I decided to take a gap year which gave me the opportunity to think about what career I might enjoy and to speak to a lot of people who worked in the field of science. Before the year was up I had decided that I wanted to do a Bachelor of Medical Research at UTAS. This course is great if you're the sort of person who is always questioning or who gets bored easily doing the same thing day in, day out. I was able to learn a lot about the human immune system, infection, human genetics and how common medications work plus a whole lot more in my three years at uni.



Now, after finishing my degree, I'm completing an Honours year in Medical Research. I'm working with the cancer genetics group at the Menzies Research Institute, looking at some of the genetic mechanisms that are thought to bring about prostate cancer. Our DNA is a code for making the proteins that make up our entire body. This mechanism is very important for keeping us in good health but when it goes wrong it can lead to the development of diseases, such as cancer. I'm looking at recently discovered molecules called microRNAs, which have been found to stop proteins from being made. I'll be looking at how microRNA function may be going wrong in people with prostate cancer. If we can find this out, then we may be able to look at ways we can correct it in prostate cancer sufferers, such as through drug treatments.

A Medical Research degree gives me the best opportunity to make a big difference! Performing experiments and researching topics that no one else in the world knows much about is pretty exciting! I want to continue doing this and hope to go overseas to other research laboratories. If you have a questioning mind and want to help people suffering with disease I highly recommend you give medical research a go.

Find out more about the Menzies Research Institute visit www.menzies.utas.edu.au

www.youngtassiescientists.com