

The Scientists



Heather McGee

What interested you in science as a child?

As a child I was always intrigued by how things worked. My real interest in science came until I was in early high school, where I took classes in Chemistry, Physics and Biology.

What did you study at University?

I decided to do a Science degree, because I really enjoyed my science subjects during High School and College. I chose subjects that I enjoyed, and kept following the ones I enjoyed the most throughout my degree, and ended up majoring in Biochemistry, Microbiology and Immunology. I really enjoyed Immunology, being fascinated by finding out how the body's immune system works, and how it can prevent diseases such as infections and cancer, so I continued doing an Honours project in Immunology looking at skin cancer.

What is your current research/career?

I decided to do a PhD following on from my Honours Project, also looking at skin cancer. In particular, I am looking at the reasons behind the relationship that has been found between exposure to sunlight as a child and melanoma skin cancer in adult life. The way I am looking at this is looking at the changes in the immune

system that occur following sunlight exposure in the childhood period, and how these might allow the skin cancer to evade the immune response. I also have a job at the Royal Hobart Hospital as a medical scientist, where I am involved in bone marrow transplants for cancer patients. I find being able to combine lab work with some clinical work working with patients very rewarding.

What are your future aspirations?

I am really enjoying my research work, and would love to continue with this in the future. I plan to move either to the mainland or overseas after finishing my PhD, to experience working in other labs, and to learn new techniques, but eventually plan to return to Tasmania with all of this experience and continue my research career here.

What do you love about science?

I am so interested in learning how things work, and understanding the intricacies of the human body. My interest in immunology allows me to learn new things, and be the first person in the world to get the results I am getting, and that eventually these may help in finding a cure for cancer.

What did you study at university?

While studying science at college I had a moment of inspiration to become an environmental lawyer and save the world! Once I got to uni I very quickly realised that studying law wasn't for me. So I pursued my interests in plant science, physical geography and oceanography. I quickly became fascinated with all different forms of plants, particularly algae and developed a strong interest in the natural world in general. I have never really had a definite goal while at university, I just wanted to learn more about the natural world and become better educated on issues that I was passionate about. University really opened my eyes to the world and helped me to realise that no particular issue is black and white.

After I graduated the obvious thing for me to do was to enrol in Honours. Algae are integral in all aquatic systems, both marine and freshwater, by providing food and oxygen for other organisms and certain types of algae can even help produce a certain gas that forms clouds. It is also amazing to think that algae growing in and under ice in the polar oceans are responsible for large amounts of the production of food and oxygen in these areas. All this from single cells that we need a microscope to see!